DOCUMENT RESUME

ED 425 367 CG 028 900

TITLE	The Changing Contexts of Aging: Opportunities and Challenges in the New Millennium. Program Abstracts. Annual Scientific Meeting of the Gerontological Society of America (51st, Philadelphia, PA, November 20-24, 1998).
INSTITUTION	Gerontological Society, Washington, DC.
ISSN	ISSN-0016-9013
PUB DATE	1998-10-00
NOTE	429p.
AVAILABLE FROM	The Gerontological Society of America, 1030 15th St., N.W., Suite 250, Washington, DC 20005-1503.
PUB TYPE	Collected Works - Proceedings (021) -- Collected Works - Serials (022)
JOURNAL CIT	The Gerontologist; v38 spec iss 1 Oct 1998
EDRS PRICE	MF01/PC18 Plus Postage.
DESCRIPTORS	Abstracts; *Aging (Individuals); Geriatrics; *Gerontology; Older Adults; Professional Associations

ABSTRACT

This special issue of "The Gerontologist" contains session by session abstracts from the society's 51st Annual Scientific Meeting. Abstracts are arranged numerically by the number of the session in which they appeared and in the order of presentation within each session. There are a total of 391 sessions. Session topics are not provided; and there is no discernable logic to the arrangement of topics. Abstracts appear to average approximately 200 words. An index of participants is provided with references to their session numbers. The Gerontological Society of America has divisions covering biological sciences, clinical medicine, behavioral and social sciences, and social research, policy, and practice. Sessions #324 (8 abstracts) and #326 (2 abstracts) focus on education-related matters, but very few other papers have a direct linkage with the field of education. (EMK)

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THE GERONTOLOGIST (ISSN: 0016-9013)

A publication of The Gerontological Society of America

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The Gerontologist, Vol 38, Special Issue I, October 1998. This is a bimonthly journal (with two additional special issues in October), owned and published by The Gerontological Society of America, 1030-15th Street NW, Suite 250, Washington, DC 20005-1503. The individual subscription price is $69.00 (domestic) or $79.00 (foreign) per year. The institutional subscription rate is $130.00 (domestic) or $140.00 (foreign). GSA members (dues $120.00 and $65.00 [students]) receive 2 of 3 journals: **The Journals of Gerontology** Series A, Series B, or **The Gerontologist**. Single issues may be purchased for $40.00 (Journals of Gerontology) or $22.00 (The Gerontologist); subscription replacement copy $20.00 per issue. Orders for subscriptions should be sent to The Gerontological Society of America, P.O. Box 79151-0151, Baltimore, MD 21279. Individual articles are available only from the author. Microfilms of back issues are available from University Microfilms, Ann Arbor, MI 48106. Microfiche are available from Johnson Associates, Inc., P.O. Box 1017, Greenwich, CT 06830. Four weeks notice is required for change of address. Please send your present label together with your new address when you move. The Society and the Editors accept no responsibility for the views and statements of the authors and advertisers.

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ADVERTISING: Address all correspondence, requests for rate sheets, advertising copy, and production materials to GSA, 1030-15th Street NW, Suite 250, Washington, DC 20005-1503. Attn: Elizabeth Borgen.

Periodicals postage paid at Washington, DC, and at additional mailing offices. Printed in the USA. **Postmaster:** Send address changes to: The Gerontologist, 1030-15th Street NW, Suite 250, Washington, DC 20005-1503.

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ABSTRACTS

The Gerontological Society of America
51st Annual Scientific Meeting
November 20–24, 1998
Philadelphia, Pennsylvania

Abstracts are arranged numerically by session number and in the order of presentation within each session.

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ANALYSIS OF ATTITUDES TOWARD LIFE AND SOCIETY AMONG SWISS ELDERS: FROM DISENGAGEMENT TO PARTICIPATION.

D. Spini, J.-F. Bickel, C. J. Lalive d'Epinay, Center for interdisciplinary, University of Geneva, 59 rte de Mon-Idée, CH-1226 Thônex (Switzerland)

The attitudes toward life and society of a Swiss sample of elders will be described. The main hypothesis is to show that these attitudes are linked more to socio-historical changes than to age (which is understood as a process of decline). Two data bases will be used. The first is a cross-sectional survey conducted in two regions of Switzerland in 1979 (age 65-94, N=1519). The second is a replication of the first (stratified samples, age 60-94 ; N=1759).

Five types of attitudes toward society have been extracted from the 1994 material (in order of descending frequency: social utility, tradition-ambivalence, tradition-diqualification, disengagement, capitulation).

A logistic regression analysis evaluates the impact of SES variables. Results indicate that to age and functional status are specifically linked to the social utility and the resignation attitudes. Other variables such as religious practice, social class, age (interpreted as linked to period and cohort effects) or gender have a greater impact on the other attitudes. Globally, the results indicate that the process of aging can explain only a part of elder attitudes toward society and that socio-historical variables have to be taken into account.

This interpretation will be argued on the basis of a comparison of acceptance of attitude items measured in 1979 and 1994. This comparison will permit us to show that there are important period and cohort effects to be taken into account and that negative attitudes toward life and society are declining in Switzerland.

AN EXAMINATION OF AGEISM: TRADITIONAL AND NON-TRADITIONAL COLLEGE STUDENTS

Kalavar, J.M., Department of Human Development and Family Studies, Penn State University, Uniontown PA 15401.

By investigating traditional and non-traditional students, this study explored whether age was salient when seeking the services of individuals in certain occupations. By introducing a variety of occupations, 150 undergraduate students were asked to identify what age they would prefer service rendering individuals to be when seeking their services, and indicate reasons for their choice. This assessment also sought to determine whether male and female college students differed in their age preferences. A sample of responses to the open-ended questions that sought explanations for stated age preferences will also be presented. Further, The Fraboni Scale of Ageism was used to examine the presence of ageist attitudes among traditional and non-traditional college students, and the relationship to socio-demographic predictors. Results showed age and gender as important considerations with regard to the construct of ageism. Results will be discussed in the context of ageism in broader society.

EMOTIONAL RESPONSE TO PICTORIAL STIMULI OF OLDER AND YOUNGER ADULTS

T.W. Frazier, M.M. Lee, S.D. Sperry, M. E. Strauss, Alzheimer's Center and Department of Psychology, Case Western Reserve University, Cleveland, OH 44106-7123.

There are changes in emotion regulation from early to late adulthood. Some studies have found decreases in emotional experience in older adults, but it is unclear if this decrease is uniform across emotions. The purpose of this study was to examine age-related differences in emotional response to pictorial stimuli selected from Lang's International Affective Picture System. Older and younger adults were asked to rate 64 pictures, varying from positive to negative in hedonic value, in terms of the arousal and pleasantness they experienced while looking at them. There was a high level of association between the emotional valence reports of older and younger respondents, (r=.87), but less correlation between reports of emotional arousal to these pictures, (r=.63). Older adults reported less arousal than younger adults to positive stimuli but did not differ in response to negative stimuli. It appears that older adults' reports of arousal are more attenuated to hedonically pleasant images than to hedonically unpleasant images.

Supported in part by NIA Grant 08012.

LIKE GRANDFATHER, LIKE ME (WHEN I'M OLDER): AN EXAMINATION OF THE CORRELATES

OF PROJECTIONS OF AGING

K.R. Herbert, C.M. Phillips, & C.S. Slotterback, Department of Psychology, University of Scranton, Scranton, PA 18510-4596.

In the present study, we had 60 college freshmen describe their relationships with their grandparents, their perceptions of older adults, and what they think they will be like when they are older. Results indicate that participants' relationships with their grandparents are related both to how they view older adults and their own projected aging. Overall, the less contact the students had with their grandparents, the more negative physical adjectives they provided to describe their own projected aging ($r(53)=-.29$, $p<.05$). The number of activities they report older adults doing is related to the number of things they see themselves doing in old age ($r(60)=.31$, $p<.05$), and those who report doing many activities with their grandparents think older adults in general do many things as well ($r(60)=.63$, $p<.001$). Thus, their relationships with their grandparents and the number of things they do with them seems to influence not only their perceptions of older adults in general, but also their own projected aging.

THE GOOD, THE BAD, AND THE UGLY: WHAT'S "BEST" AND "WORST" ABOUT BEING OLDER

P.A. Palumbo & C.S. Slotterback, Department of Psychology, University of Scranton, Scranton, PA 18510-4596.

In the present study, 60 college freshmen participated in a survey of attitudes toward older adults and grandparents. As part of the survey, participants were asked to list items that reflected what the best things about being older are, as well as the worst things. The number of descriptors given for "worst" things was related to the number of items listed for "best" things about being older ($r(60)=.64$, $p<.001$): those participants who listed many bad things were also able to think of many good things. The "worst" things cited centered on physical descriptors (e.g., not able to do as much, being weak or ill), while the "best" things focused on personality and emotional-relational characteristics (e.g., getting more respect, watching people grow). A relationship was also found between the age given to describe "an old person" and the number of "worst things" about being old ($r(60)=.27$, $p<.05$), such that the older the age, the more "worst things" they reported. Perhaps the negativity expressed about older adults is a reflection of participants thinking about the oldest-old.

WORKERS ATTITUDES TOWARD THE ELDERLY IN NURSING HOMES.

R. GLIDEWELL, P. FAULKENDER, & R. JOHNSON. Department of Psychology, University of Southern Mississippi, Hattiesburg, MS 39406-5025.

The purpose of this study was to assess the relationship between the Templer Death Anxiety Scale, the Anxiety about Aging Scale, and Kogan's Attitude About Old People Scale in nursing personnel working at geriatric facilities. The study also examined the differences between nursing staff and non-nursing staff. Participants in the study were 515 employees in 16 long term care facilities located in a southern state. All participants were given a demographic sheet and the above mentioned scales. Unlike other relevant studies, this study found positive attitudes toward the elderly and no differences between nursing and non-nursing staff. There was also a positive correlation between attitudes and aging anxiety and a negative correlation between attitudes and death anxiety as hypothesized. Possible reasons for these results will be discussed.

PERCEIVED RISK AND THE USE OF INEFFICIENT COMPENSATORY STRATEGIES RELATED TO HEARING LOSS

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[2]Southern Illinois University at Edwardsville.

Although people may perceive significant hearing changes as they age, it is unclear how these changes affect perceived risk for future hearing loss and how people compensate for a hearing impairment. Ninety-six older adults (M age = 72.8) indicated how much perceived changes in hearing over the past five years affected life domains (e.g., social activities), the use of compensatory behaviors for hearing loss (e.g., hearing aid), and perceived risk of hearing loss in the future. Perceived changes in hearing had a significant impact on life domains. Hierarchical regression analyses also revealed that changes in hearing directly affected risk perception with people becoming more pessimistic for future hearing loss. Perceived hearing change on risk perception was mediated by compensatory strategies.

Hearing changes were associated with use of a phone amplification device ($r = .22$), hearing aid ($r = .41$), and asking people to talk louder ($r = .60$). Few participants, however, indicated that they used a phone amplification device (3%) or a hearing aid (9%). The predominant strategy was to ask people to talk louder (30%). Of the 28 participants who ask others to talk louder, 23 (82%) indicated that they did not use a hearing aid. Inefficient compensatory strategies may affect quality of interpersonal relationships and communication.

Life Review as a Means of Promoting Positive Images of Aging in Rural Arizona.

J.B. Sellers, Department of Nursing, Northern Arizona University, Flagstaff, AZ 86011

The context of aging will not change if health care providers avoid working with the elderly due to negative images of older people. This paper will discuss data identifying the value of life review in promoting positive images of the elderly.

The sample consisted of 104 junior baccalaureate nursing students. The age range was 22-56 (mean=29). Of the 104, 63 were married 34 single, and 7 divorced or separated. (N=75). The majority were from rural communities. Prior to the life review project, students spent 2 semesters in a long term care setting and they entered the geriatric rotation with negative views of the elderly. Each student conducted an in-depth interview with someone 75 or older (58 women; 46 men). Students identified 3 changes in views of the elderly 1) a positive rather than negative image of aging, 2) decreased personal fear of aging, and 3) a greater appreciation for history and culture. It was found that students who identified a decrease in fear of aging also had a new interest in geriatric nursing.

With positive images of the elderly, providers will be involved in health promotion for the elderly, and the context of aging can indeed change.

THE JAPANESE ELDERLY'S ADAPTIVE VIEW OF SELF AND AGING

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S. Tsuhako, Tokyo Medical and Dental University, School of Allied Health Sciences, 1-5-45 Yushima, Bunkyo-Ku, Tokyo 113-8519, Japan.

An unusual dynamic between aging stereotypes and self-identity exists in Japan. The dynamic arises from the tendency of the Japanese to maintain highly developed outer and inner selves. This study examined how these selves impact on how the old Japanese view the aging of others and the aging of themselves. We compared old and young individuals in Japan to old and young individuals in China and the United States. We found that the Japanese elderly expressed more negative attitudes toward old people in general but more positive self-concepts than elders in China and the United States. The results shed light on the role of the self in accepting or rejecting societal stereotypes about aging.

INFLUENCE OF AGE ON THE CREATIVE PRODUCTIVITY OF CORPORATE RESEARCHERS AND ENGINEERS

J NISHIMURA, Y SATO, Tokyo Kasei University, 2-15-1 Inariyama Sayama-shi Saitama-ken, Japan

The purpose of this study is to examine the influence of age on the creative productivity of corporate researchers and engineers. A questionnaire survey was conducted to 1067 researchers and engineers in research and development department in the drug manufacturing industry. Six indices related to the creative productivity of these 3 years were analyzed using principal component analysis with Varimax rotation. From the results were found the factor regarding new research(F1) and the factor regarding commercialized products(F2). Both factors had positive correlation with age. Moreover, with the multiple regression analysis using each factor as a dependent variable and 40 personal and organizational variables as independent variables, the following became clear. a) The joint research, the society participation, the doctorate degree, the research report in the company and the personal networks had a positive influence on F1 whereas age had a negative influence on F1. But the effect of age was smaller than that of the other variables. b) The post, the length of one's service and to study abroad before getting a job had a positive influence on F2 whereas the annual income and the society participation had a negative influence on F2. The influence of age on F2 was negligible.

SOCIAL JUDGEABILITY AND AGE STEREOTYPING.

M.L. Hummert, T.A. Garstka, & W. Geiger, Communication Studies Dept., 3090 Wescoe, University of Kansas, Lawrence, KS 66045.

This study replicated an earlier study (Hummert & Garstka, 1997) which found that trait cues were more powerful than physical cues in activating positive and negative age stereotypes. Photos of older women were used in both studies to represent positive and negative age stereotypes. While the earlier study used photos of women in their 80s to represent all stereotypes, the current study matched the age of the woman with the nature of the stereotype (Positive Stereotype, aged 60; Moderately Negative, aged 70; Negative, aged 80). We expected that with this change we would find that physical cues would be comparable to the trait cues in activating the age stereotypes. Young, middle-aged and older adults (N= 135) provided assessments of older targets in a 3 (cue type: traits only, photo only, traits + photo) x 3 (target stereotype: Golden Ager, Despondent, Severely Impaired) design, with repeated measures on the last factor. As in the earlier study, DVs included advice to each target, ratings of the vocal style the subject would use to her, and assessments of her personality traits, cognitive and physical competence. As predicted, subjects' assessments revealed that even in the photo-only condition the positive and negative stereotypes had been activated, with the most extreme judgments occurring in the trait + photo condition. These results are interpreted both for their implications about the consistency of information cues and age stereotype activation and about how social judgeability criteria (Leyens, Yzerbyt & Schadron, 1994) may operate to influence that process.

Research supported by Grant R29-AG09433 from the National Institute on Aging/National Institutes of Health.

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UNDERSTANDING HEALTH LITERACY: THE HEALTH CARE COST IMPLICATIONS OF LOW LEVELS OF FUNCTIONAL LITERACY

Gregory O'Neill, Ph.D., Robert Friedland, Ph.D.
National Academy On An Aging Society, 1030 15th St. NW., Suite 250, Washington, D.C., 20005.

This paper examines the health care costs associated with low levels of functional literacy. Since surveys on health care use and expenditures do not yet include either measures of functional literacy or health literacy, the present approach develops and implements a statistical technique for applying information from a survey on functional literacy to a survey with data on health care use and medical expenditures. A model that predicts the functional literacy of individuals was estimated based on data found in the 1992 National Adult Literacy Survey (NALS). The explanatory variables used in this model of functional literacy are also found in the Survey of Income and Program Participation (SIPP) 1993 Panel data. We then constructed a measure of functional literacy for individuals in the SIPP data, using the predictive model of functional literacy developed in the NALS data as a base. Our analysis suggests that low functional literacy is associated with a greater number of physician visits in the past 12 months and higher direct medical care expenditures.

Carolyn E. Adams-Price, Ph.D., Department of Psychology, Mississippi State University, Mississippi State, MS 39762-6161, 601-325-7658. The effect of outcome and responsibility on victim blaming in young, middle-aged, and older adults.

Victim blaming is the tendency of people to believe others must have done something bad if bad things have happened to them. Although victim blaming has been a popular topic in social psychology, little is known about victim blaming in older adults. In this study, I looked at age differences in victim blame in 4 different vignettes. 145 young, middle-aged, and old subjects ranging from 16-88 years of age rated the victim's irresponsibility and blame for incidents. Results showed that older adults blamed victims more than middle-aged or young adults in all vignettes, but unlike younger adults, older adults blame the victim more when the victim was irresponsible and the outcome was not serious as they do when the victim was irresponsible and the outcome was serious. This suggests that older adults base victim blame on individual responsibilities and not outcome.

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MASCULINITY IDEOLOGY & RELIGIOSITY AMONG WELL ELDERS

E. H. Thompson, Jr., A. B. Hunt, & C. S. Sintros, Department of Sociology and Anthropology, Holy Cross, Worcester, MA 01610.

The study of gender and religion has primarily occurred within a comparative framework that has consistently constructed a finding that women are more religious than men. The discourse built around this finding is that religious orientation is more compatible with the social experiences and statuses of women. The assumption made is that one masculinity script defines all men's lives across their entire life cycle and one femininity (or female role) structures women's. Thompson (1991) suggests that religiousness is influenced more by gendered "outlook" and that a "masculine" outlook would be less compatible with a religious orientation whereas a "feminine" outlook would be more compatible. The current study was design to extend the earlier investigation of young adults and examine the effect of a gendered outlook on elders' religiosity. Developed was a new measure of elders' endorsement of a traditional masculinity ideology. It was theorized that a religious orientation would not be prominent among men *and* women who advocate a masculine gendered outlook (i.e., endorse a traditional masculinity ideology). Based on a random sample of older adults from the Worcester MA annual city census and a second, purposive sample of African American elders form the same community, multivariate regression analysis that controlled for gendered outlook indicated that this factor was a significant predictor of intrinsic religiousness (Batson) above the effect of gender (or sex) as a demographic category. It is theorized that men and women who develop a masculinist outlook find the experiences of being religious as incompatible.

GENDER DIFFERENCES IN STRAIN AMONG CAREGIVERS OF INSTITUTIONALIZED AND NON-INSTITUTIONALIZED LONG-TERM VENTILATIOR PATIENTS. E.J.Stevens, Frances Payne Bolton School of Nursing, Case Western Reserve University, 10900 Euclid Ave., Cleveland, OH 44106-4904; P.Brennan, University Wisconsin-Madison; B.J.Daly, & S.L.Douglas, FBP School of Nursing, Case Western Reserve University.

Previous research suggests that gender differences exist in strain among caregivers of chronically critically ill patients. Though the relationship between gender differences of demands placed on caregivers is well documented, this link has not been studied for long-term ventilator patients. With an increase in the number of patients who have experienced prolonged mechanical ventilation and high needs for care, considerable demands are placed on family caregivers. This research focuses on gender differences in the relationship between hours of care provided and strain for two groups of caregivers of long-term ventilator patients: in-home caregivers (N=27) and caregivers of post-hospital discharge institutionalized patients (N=60). Results indicate gender differences in hours of care provided, overload and burden. In-home and institutionalized caregivers reported providing an average of six hours of care per day. Preliminary results indicate women provided more care on average than did men and experienced greater burden and overload. These findings

suggest gender differences among caregivers of long-term ventilator patients in hours of care provided and predictors strain.

THE CHALLENGE OF COMPETING LOYALTIES CAREGIVING OBLIGATIONS OF JAPANESE WOMEN IN THE NEW MILLENNIUM

G.M. Tryban, Department of Sociology, Indiana State University, Terre Haute, IN 47809

Japan has become well known as the site of the greatest longevity in the world, a distinction having ramifications for both the family and society. As the Japanese government works at constructing and implementing the New Gold Plan, families in urban and rural areas are also constructing their own plans for elderly caregiving, though much less is known about elderly living in suburban and rural settings, especially on islands other than Honshu, the main island. This two month observational research project looks at a community of approximately 131,000, on one of the three smaller islands. Those interviewed were 13 female caregivers, city sponsored as well as privately employed visiting nurses, city social workers, the coordinator of volunteer programs, and the director of city social services for the elderly. Finally, a day care center attached to a co-op health clinic was observed.

Women reported experiencing competing obligations to their parents, to whom they felt gratitude for their birth and nurturing, and to the parents of their husband with whom customary caregiving obligations reside. In formulating a caregiving strategy women tried to achieve a balance by considering the structure and nature of the relationships within their own and their husband's family, temporal and financial resources, obligations to their own nuclear family and its life-cycle stage. There was considerable variation in the weights given and the qualitative assessment of these variables and women's attempts to reconcile their assessment of their own personalities and caregiving capacities. Other important factors to emerge were the issue of bedridden elderly, or *netakiri ryojin*, and the disparity between women's views and the views of city planning officials.

GENDER DIFFERENCES IN PHYSIOLOGIC PREDICTORS OF COGNITIVE ABILITIES IN OLDER UNLIKE-SEX TWINS IN SWEDEN

C.H. Gold, G.E. McClearn, Department of Biobehavioral Health, Pennsylvania State University, University Park, PA 16802; S. Berg, B. Malmberg, Institutet For Gerontologi, Jonkoping, Sweden.

Previous research has found that, on average, women perform better than men on reasoning and verbal cognitive tasks, and that men perform better on spatial cognitive tasks. A population-based sample of unlike-sex twins aged 70-80 (N=249 pairs) in Sweden were assessed in their homes by registered nurses. This sample provides a unique opportunity to examine gender differences in an ideally matched group of males and females. Significant findings from paired sample analyses included: brothers outperformed their twin sisters on the figure rotation exercise ($p<.001$); sisters had higher scores on two memory tests: Thurstone picture test ($p<.01$) and a Word Recall test ($p<.001$); sisters had higher scores on tests of perceptual speed ($p<.01$) and reasoning skills ($p<.01$). Controlling for age, regression analyses found lung capacity to be a significant predictor of all the cognitive tests for both sexes. Grip strength was more likely to be a significant predictor of cognitive ability for men, and blood pressure was more likely to be a significant predictor for women. Results confirm the importance of the relationship between physiologic measures and cognitive abilities in older men and women and the value of examining separate models by gender.

THE IMPACT OF GENDER ON CHRONIC PAIN AND WELL-BEING: THE GENDER TWIN STUDY

P.C. Griffiths, B. Malmberg , S. Berg, & S.H. Zarit Department of Human Development & Family Studies, 115 Henderson Building South, Penn State U., University Park, PA 16802, and Institute of Gerontology, University College of Health Sciences, S-551, 11, Jönkoping, Sweden.

Chronic pain is a significant problem for a large number of individuals over the age of 65. Recent reports of gender differences in self-reported pain in older adults have produced inconclusive results. The present study used multiple pain measures to compile a comprehensive assessment of prevalence and frequency of pain in a population based sample of unlike-sex septegenerian twins residing in Sweden (N=249 pair). While over-all prevalence rates and duration of pain were similar for men and women, paired sample t-tests revealed significant gender differences in type and location of pain experienced as well as in qualitative aspects of the pain experience. Women had a higher frequency of multiple pain locations, and upper extremity pain complaints. Men reported more back, chest and hip pain than women. Perception of pain was differentially related to measures of health and well-being for men and women. These results suggest that although gender appears to have little impact on prevalence of pain in late-life the nature and ramifications of pain may differ between the sexes.

MASTERY OVER WELL-BEING AMONG NEVER MARRIED ELDERLY WOMEN

M. Neiss, Department of Family Studies, University of Arizona, Tucson, AZ 85721.

Well-being among never married women is often found to be lower than that among married women. Older never married women, however, report levels of well-being equal to or higher than their married counterparts, a finding not accounted for within traditional theoretical frameworks. The purpose of the present study was to investigate well-being among this population. A phenomenological approach was chosen in order to place the women's voices in the center of data analysis. Participants were interviewed about their life stories and completed an empirical measure of well-being

Quantitative and qualitative data suggested all of the women in the study had high levels of well-being. Furthermore, an important theme in the interviews revolved around the women's mastery over their well-being. The results demonstrate how women can actively enhance their emotional health, a concept overlooked by most theories.

CHANGES IN HOUSEWORK AFTER RETIREMENT: A PANEL ANALYSIS

M. Szinovacz, Department of Sociology, Old Dominion University, Norfolk, VA 23529.

Whether and how spouses' housework and relative division of household labor changes after retirement has spawned researchers' and practitioners' interest. However, research to date remains inconclusive. This paper addresses this issue using panel data from the National Survey on Families and Households (N=543 continuously married couples aged 50-75 at wave 1). The data indicate that changes in work hours of either spouse impact both on changes in each spouse's housework hours as well as on the division of labor between spouses. Such changes are further contingent on spouses' gender role attitudes. Other factors influencing changes in housework hours over time include health, changes in household composition, wife's work history, and wife's perceived dependence on the marriage. These data suggest that spouses' time commitments in combination with learned roles have the most pronounced impact on the allocation of housework, but power issues may play some role as well. Thus, a combination of theoretical models rather than one explanatory framework are necessary to fully account for retirement-related changes in housework.

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Transgenic Approaches to Aging Research: Potential and Pitfalls

Chair: Arlan Richardson, University of Texas Health Science Center at San Antonio

Arlan Richardson, University of Texas Health Science Center at San Antonio, "Transgenic Models to Test the Oxidative Stress Hypothesis of Aging"

Wen-Hwa Lee, Institute of Biotechnology, Univ. of Texas Health Science Center at San Antonio, "Temporal Control of Transgenes for the Study of Aging: the Retinoblastoma Model"

Jan Vijg, Harvard Medical School, "Transgenic Approaches in Studying Tissue-Specific Mutation Frequencies and Spectra in Cancer and Aging"

Robert O'Doherty, Dallas Southwestern School of Medicine, "Metabolic Manipulations Using Recombinant Viral Targeting"

One of the major difficulties in aging research (especially aging research using higher organisms) has been the ability to test experimentally if a change in a specific gene or physiological process is involved in aging. For the most part, investigators have been forced to conduct correlative experiments with animals, i.e., correlating changes in a process or a macromolecular entity to changes in aging. While correlative experiments are important because they define what changes occur in an organism with age and they provide investigators with information that can be used to support or refute various theories of aging, these types of experiments do not allow one to test directly the role of a specific gene in aging or a theory of aging. With the advent of recombinant DNA technology and the ability to genetically engineer mice, investigators now have an experimental system whereby a specific gene or process can be altered in rodents, and the effect of this alteration on aging can be studied. Using this unique system, it will be possible to probe more directly the biological mechanism(s) underlying the aging process. In this symposium, we discuss the current experimental transgenic mouse models that will help scientists gain insight into the aging process or diseases that occur with age.

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ALL IN THE FAMILY: POPULATION GENETICS OF EXTREME LONGEVITY.

T. Perls, Harvard Division on Aging, 643 Huntington Ave, Boston, MA 02115

Participants:

K. Rockwood & T. Perls. (Dalhousie University, Halifax, Nova Scotia B3H2E1 and Harvard Division on Aging, Boston) Unusually high centenarian prevalence in Nova Scotia.

T. Perls, *S. Monks, #M. Loh, A7CM Houser, +A. Poe, +A. Deangelis, **P. Sloane. (Harvard Division on Aging, Boston, *National Maritime Museum, Greenwich, London UK, SE10 9NF, #Dept Art History, University of Toronto, Toronto, ONT M5R-2P8 Canada A7Dept of Art, Smith College, Northampton, MA 01063 +Art History, Rutgers University, New Brunswick, NJ 08903 **City University of New York, NY 10036) Did the extreme old exist before the nineteenth century?

R. Kerber, E. O'Brien, K.R. Smith, R. Cawthon. (Depts. of Human Genetics, Oncological Sciences and Family and Consumer Studies, University of Utah, Salt Lake City, UT 84112) Longevity in Utah genealogies: support for both nuclear and mitochondrial genetic contributions.

M. Shea, E. Bubrick, K. Wachter, T. Perls (Dept Demography, Univ California, Berkley, Harvard Division on Aging, Boston) Is there a higher than expected by chance prevalence of extreme old sibling pairs?: a spectrum of possibilities regarding familial aggregation of extreme longevity.

Discussant: To be Announced.

Evidence is accumulating that extreme longevity may be a valuable phenotype for the discovery of longevity assurance genes (genes which influence rate of aging and susceptibility to diseases associated with aging). A founder effect might in part explain the unusually high prevalence rate of centenarians in populations such as Nova Scotia. Observations which indicate that the human life span of approximately 100 years is not a recent phenomenon but rather that it has existed for millennia would support the hypothesis of an evolution-determined life span. An evolution-determined life span would in turn infer the selection, over time, for better and better longevity assurance genes. Careful analyses of extremely well characterized Mormon pedigrees reveals both nuclear and mitochondrial (maternal lineage) patterns of inheritance which significantly contribute to the risk of achieving very old age. The significant role of heritability is also suggested by the higher than expected by- chance-prevalence of extremely old sibling pairs.

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PREDICTORS OF HEALTHY AGING IN MEN WITH LONG LIVES.

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Objective: To identify the risk factors which consistently predicted staying healthy past age 70.

Methods: Over 8000 men of Japanese ancestry were followed for 28 years with repeat examinations and surveillance for deaths and incident clinical illness. Physical and cognitive functions were measured at an examination completed in 1993. Measures of healthy aging included surviving and remaining free of major chronic illnesses and of physical and cognitive impairments.

Results: Of 6505 men who were healthy at baseline, 2524 (39%) died prior to the final exam. Of the 3263 available survivors, 41% remained free of major clinical illnesses, 40% remained free of both physical and cognitive impairment and 19% remained free of both illness and impairment. The most consistent baseline predictors of healthy aging were low blood pressure, low serum glucose, not smoking cigarettes, and not being obese. Good lung function and low intake of alcohol were strong predictors of survival but not the other outcomes. These findings indicate that, beyond the biological effects of aging, much of the illness and disability in the elderly is related to risk factors present at mid-life.

SHIFT OF MORTALITY PLATEAU TO OLDER AGES

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The mortality rate increases nearly exponentially with adult age in many species. The age-related mortality rise tends to slow down at old ages in all of the several species for which life tables of large cohorts/populations are available. However, little work has been done on intra- and interspecies differences in the age pattern of mortality deceleration. In this study, we show that the age of onset of mortality deceleration has become increasingly older (from about age 70 to about age 80 within a few decades) in many human populations that recently experienced significant reductions of old-age mortality. Alternative explanations of the association between the old-age mortality reduction and the shift of mortality plateau are put forward.

DOPAMINE INDUCES APOPTOSIS IN CULTURED RAT STRIATAL ASTROCYTES.

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We examined astrocytes in cultures of neonatal rat striatum for apoptosis following dopamine treatment. Exposure to cultures to high concentration (100 μM<) of dopamine resulted in astrocyte death. We found that the dopamine induced-astrocyte death was apoptosis using morphological, in situ end labeling and immunohistochemical (anti-single strand DNA antibody) procedures. The effect of dopamine was nearly completely blocked by pretreatment with antioxidants (N-acetyl cysteine and catalase), but was not blocked by pretreatment with a dopamine receptor antagonist (spiperone). These findings suggest that the extraneuronal dopamine transporter exists in astrocytes, and that apoptosis of astrocytes may protect dopamine-induced excitotoxicity

EFFECT OF SYNTHETIC DIPEPTIDE THYMOGEN® (GLU-TRP) ON LIFE SPAN AND SPONTANEOUS TUMOR INCIDENCE IN RATS

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Seventy six 5-month-old outbred female rats were randomly subdivided into 2 groups and were s.c. injected with 0.2 ml of normal saline (controls, 32 rats) or with 5 μg/rat of Glu-Trp dissolved in 0.2 ml of saline (44 rats), 5 times per week for 12 months. Animals were monitored for a life span and all discovered tumors were studied microscopically. Mean life span of control and Glu-Trp-treated rats was similar but mean life span of 10% maximum long-lived control rats was 949±16.1 days whereas in Glu-Trp treated rats this value was 1048±21.1 days ($p<0.001$). Six out of 44 rats treated with Glu-Trp survived over the maximum life span of control rats

(965 days). The aging rate evaluated as α in Gompertz equation was 0.0071 days^{-1} in controls and 0.0041 days^{-1} in rats exposed to Thymogen. The dipeptide delayed the age-related decrease in search activity of rats (test "open field"). Total tumor incidence was by 1.5 times less ($p<0.01$), malignant tumor incidence - by 1.7 times less ($p<0.01$) and hematopoietic malignancies (leukaemias and lymphomas) by 3.4 times less ($p<0.02$) in rats exposed to the dipeptide in comparison to controls. Thus, treatment with Glu-Trp delayed aging rate and decreased spontaneous tumor incidence in rats.

HUMAN LONGEVITY, SPONTANEOUS MUTATIONS AND PATERNAL AGE.

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The human spontaneous mutation rate for DNA base substitutions is reported to be very high, presumably more than one new mutation per zygote (Crow, 1997, PNAS USA, 94: 8380-86). The mutation rate is much higher in male sperm cells than in female ovaries and increases with paternal age due to large number of cell divisions in the male germ line (Crow, 1997). The purpose of this study is to check whether human longevity is affected by increased mutation load expected for the progeny of older fathers. For this purpose the high quality data (more than 15,000 records) on European royal and noble families were analyzed. The data on offspring longevity were adjusted on historical trends and fluctuations in life expectancy of human birth cohorts. Also, in order to avoid bias in estimation of the offspring life span, only extinct cohorts were analyzed (born in 1800-1899). It was found that adult daughters (30+ years) born to older fathers (45-55 years) live shorter and for each additional year of paternal age the daughters loose about 0.5 ± 0.2 year of their life span. This paternal age effect is controlled for the effects of other important variables – maternal age at reproduction, paternal and maternal longevity and sex-specific cohort life expectancy. In contrast to daughters the sons are not significantly affected by delayed paternal parenting. Since only daughters inherit paternal X-chromosome, this sex-specific life span shortening for daughters born to older fathers might indicate that genes affecting longevity and sensitive to mutation load are probably concentrated in X chromosome. This study was supported by NIA grants P20 AG12857 and AG13698-01.

NON-LINEAR TRANSMISSION OF HUMAN LONGEVITY FROM MOTHER TO DAUGHTER.

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Previous studies on familial resemblance for human longevity were based on the fundamental assumption of linear relationship between parental and offspring traits well justified in quantitative genetics (Falconer, 1989). The purpose of the present study is to test the validity of linearity assumption against the real data on human life span of particularly high quality (data on European royal and noble families). For this purpose the familial transmission of human longevity from mothers to daughters (more than 3000 cases for adult daughters born in 1800-1880) was studied since females did not have high violent losses due to military service. Daughters born to mothers who lived 85-89 years had statistically insignificant gain in life expectancy of 0.7 years only compared to daughters born to mothers who lived 40 years shorter (45-49 years). However daughters born to long-lived mothers (90-94 years) have mean age at death 5.4 ± 1.5 years higher than the control population. Moreover, for daughters of those mothers who lived 95-99 years the mean age at death was even 8 ± 2 years higher than for control population. Thus, familial transmission of human longevity from mother to daughter is essentially non-linear with very weak resemblance before maternal life span of 85-89 years and very high additive heritability after that age. These results are consistent with the predictions of evolutionary theory of aging and mutation accumulation theory in particular that the additive genetic variance for human life span should increase with parental longevity (Gavrilova et al., 1998, Human Biology, 70: 799-804). This study was supported by NIA grants P20 AG12857 and AG13698-01.

ANEUPLOIDY, SEX CHROMOSOMAL DOSAGE AND HUMAN CELLULAR AGING IN VITRO.

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In dividing cells, aneuploidy is caused by non-disjunction of chromosomes. In this study I have analyzed the degree of aneuploidy levels as related to various sex chromosomal dosages in cultured fibroblasts of human males and females with variable numbers of X and/or Y chromosomes. I have used the method of fluorescence in situ hybridization (FISH) with X- and/or Y- specific DNA probes for accurate detection of aneuploidy at both interphase and metaphase stages. The results indicate that the relative levels of sex chromosomal aneuploidy in various cell samples are directly proportional to the relative dosages of the X- and/or Y- chromosomes in various individuals; i.e., the sex chromosomal aneuploidy increases with the increase in X and/or Y chromosomal dosage in various cell samples. In all cases, the interphase aneuploidy values are significantly higher than that at metaphase. The sex chromosomal aneuploidy level of each cell sample also increases with in vitro aging of cell populations. (Supported by a Faculty Research Grant of Fordham University)

AGE-RELATED DIFFERENCES IN TUMOR NECROSIS FACTOR-∝ PRODUCTION DURING HYPERGLYCEMIA.

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Tumor necrosis factor-(TNF)-∝ may be involved in the development of insulin resistance. However, the effects of age, hyperglycemia and pancreatic ß-cell secretion on TNF-∝ production are unknown. Hyperglycemic clamps (3-h, 10 mM) were performed on 7 older (OLD; age, 67 ± 2; BMI, 24.7 ± 1.0) and 7 younger (YNG; age, 22 ± 1 yrs; body mass index, BMI, 21.8 ± 1.3 kg.m^{-2}) healthy sedentary males with normal glucose tolerance. TNF-∝ production at basal (BASE) and hyperglycemia (HYPER) was measured in vitro from lipopolysaccharide-stimulated (1 ng.ml^{-1}) mononuclear cells (MNC). Plasma glucose, insulin and C-peptide levels were similar in both groups at BASE and HYPER. Glucose infusion rates were lower ($P<0.004$) in OLD compared to YNG. TNF-∝ production (pg.ml^{-1}) was similar in YNG and OLD at BASE. During HYPER, TNF-∝ was repressed ($P<0.02$) in YNG (126 ± 49 vs. 230 ± 46; HYPER vs. BASE), but not OLD (182 ± 42 vs. 153 ± 37), with significant group differences in response ($P<0.05$). MNC ($\times10^3$ cells.µl^{-1}) were decreased ($P<0.04$)

with HYPER in YNG (5.2 ± 0.7 vs 6.0 ± 0.5) and OLD (6.0 ± 0.3 vs 6.6 ± 0.4). However, monocytes ($\times 10^3$ cells$\cdot \mu l^{-1}$) were suppressed in OLD (0.3 ± 0.0 vs. 0.5 ± 0.1; P=0.05) but not YNG (0.3 ± 0.0 vs 0.3 ± 0.1). TNF-∝ response to HYPER was related to fat mass (r=0.72, P<0.01). In conclusion, aging and modest increases in adiposity prevent the "normal" suppression of TNF-∝ production during the physiological stress associated with hyperglycemia.

NIH Grants AG-12834, RR-10732 & AG-11811

EFFECTS OF AGING ON ADRENAL ANDROGEN SECRETION IN WOMEN. C.R.Parker ,Jr., R.Azziz, G.Hines, S.M.Slayden, S. Bae, Department of Obstetrics and Gynecology Univ of Alabama at Birmingham, Birmingham AL, 35233.

Aging in humans is associated with reduced serum levels of DHEA and DHEA sulfate (DS); the reason for this is unclear. We compared the responses of the adrenal to both bolus and graded infusions of ACTH after overnight adrenal suppression in 32 young (20-35yrs) and 35 postmenopausal women, >/= 55 yrs of age. Basal serum concentrations of DHEA, DS, and androstenedione (A4) were reduced significantly in the older women but there was no age-associated change in cortisol levels. The sensitivity (minimal dose of infused ACTH to significantly activate adrenal steroid secretion) was unchanged in aging for DHEA, A4, or cortisol; secretory responses of DS were not determined due to its long plasma half-life and large plasma pool size. The responsiveness (slope of the dose-response curve) for A4 and cortisol was unchanged whereas that for DHEA was reduced by 25 % in the postmenopausal women. The maximally stimulated level and the incremental rise in levels of DHEA , but not those of cortisol or A4, after a 250 ug bolus of ACTH were significantly lower in the older women. Thus, the reduced capacity for adrenal androgen secretion may be due to a reduced number of cells competent to produce steroids such as DHEA and DS in aging women, i.e. the zona reticularis, rather than a reduction in adrenal sensitivity to ACTH.

LINGUISTIC ABILITY IN EARLY LIFE AND LONGEVITY: FINDINGS FROM THE NUN STUDY. D.A. Snowdon,[1,2] L.H.Greiner,[2] S.J. Kemper,[3] N. Nanayakkara,[2] J.A. Mortimer.[4] [1]Department of Preventive Medicine & [2]Sanders-Brown Center on Aging, University of Kentucky, Lexington, KY 40536; [3]Psychology Department, University of Kansas, Lawrence, KS 66045; [4]Institute on Aging, University of South Florida, Tampa, FL 33612.

We investigated the relationship between linguistic ability in early life and all cause mortality in late life in 180 participants in the Nun Study. Two measures of linguistic ability, idea density and grammatical complexity, were derived from autobiographies written between ages 18 and 32. An average of 58 years later, all cause mortality rates were determined. Of the two measures, idea density had the stronger and more consistent relationship to the rate of all cause mortality in late life. A one-unit decrease in idea density was associated with a 49 percent increase in the mortality rate (95% CI=17-89; p-value=0.001). Low linguistic ability in early life may reflect suboptimal cognitive and neurological development which may increase susceptibility to aging-related declines and disease processes, resulting in a higher mortality rate late in life.

ADRENERGIC NERVE TERMINAL FUNCTION IN THE HEART AND SPLEEN OF AGING MALE AND FEMALE F344xBN(F1) RATS.
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Our laboratory is investigating age-related changes in adrenergic nervous system control of cardiac and splenic function due to alterations in norepinephrine (NE) release and reuptake. We examined NE uptake and NE release in cardiac and splenic synaptosomes (isolated nerve terminals) obtained from male and female F344xBrown-Norway rats at 6 and 24 months of age. NE uptake was determined using 100 ug of synaptosome protein exposed to 300 nM [3H]-NE for 10 minutes in the presence or absence of 1 uM DMI, a specific neuronal NE uptake inhibitor. NE uptake declined with age in cardiac synaptosomes from ad libitum (AL) fed male rats, but not in dietary restricted (DR) male rats or in female rats. There were no age-related changes in NE uptake in splenic synaptosomes. NE release was induced by exposing synaptosomes to buffer containing 50 mM K+. There were no age-related changes in NE release from cardiac synaptosomes. The lack of an age-related decline in NE release between 6 and 24 months as seen in male F344 and BN rats is probably related to the longer life span of the F344xBN strain. NE release declined in splenic synaptosomes from male AL rats, but not in DR or in female rats. This study was supported by a grant from the NIA (AG 11060).

ADVANCED GLYCATION ENDPRODUCTS (AGEs) BIND REDOXACTIVE COPPER AND DIVALENT METALS IN VITRO AND IN VIVO. Amit K. Saxena, Poonam Saxena, Christopher Randle, Miriam F. Weiss, Vincent M. Monnier, Cleveland, OH.

Considerable evidence suggests that oxidative mechanisms are involved in the aging process and in age-related diseases. Here we tested the hypothesis that N^{ε} (carboxymethyl) lysine (CML), the major AGE formed in vivo, has EDTA-like properties and participates in metal catalyzed free radical generation. CML-rich poly-L-lysine and BSA made from glyoxylic acid were found to bind Copper, Calcium and Zinc in relationship to CML content. BSA-CML-Cu^{II} complexes were highly redox active toward ascorbate and induced protein fragmentation in presence of H_2O_2. CML-rich tendons that were implanted i.p. in diabetic rats for 20 days bound 3x more copper than normal tendons or implants in control rats and oxidized ascorbate 3x faster. Using an affinity purified polyclonal CML antibody, human plasma proteins were immunoprecipitated from healthy and uremic diabetic patient and exposed to ascorbate:

	Protein	CML	Ascorbate Oxidized
(Mean± SD)	(mg/ml)	(nmol/mg)	mg/prot (%)
Healthy(n=6)	0.51± 0.19	1.52 ± 0.46	44±0.6
Db-Uremic(n=7)	1.62±0.34*	2.49±0.70*	87±0.4*

$p < 0.01$ In all experiments ascorbate oxidation was prevented by the chelator DTPA suggesting that chelation therapy could be beneficial against diabetic complications mediated by transition metal catalyzed oxidation reactions stemming from AGE-metal complexes.

Analysis of an Acute Pharmacological use of Growth Hormone in "Adult" and "Old" Rats.

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There are circumstances such as acute wasting conditions in which the use of pharmacological doses of recombinant Growth Hormone (rGH) may be beneficial. In the adult, an intermediate of the strong anabolic response of lean tissues to GH is IGF-I. The liver is the major organ producing IGF-I for systemic circulation. The major form of IGF-I released from the liver is in a protein bound complex which includes Insulin-like Growth Factor Binding Protein-3 (IGFBP-3). These studies involved Fisher 244 rats of two ages, 9-10 mos. (adult) and 22-23 mos. (old). Half of the animals of each age were treated with rGH, 4mg/kg twice daily (morning and evening) and half of the animals were untreated. Groups of 4 animals were treated for 1 to 6 days. All animals were sacrificed for removal of blood and tissue samples between 10 AM and 12 noon to control for the corticosterone diurnal pattern. Other work in this laboratory indicated that corticosteroids inhibit the GH induction of IGF-I in the liver. We measured the induction of both IGF-I and IGFBP-3 in the control animals and in the treated animals. The results demonstrate that the expression pattern for IGF-I and IGFBP-3 are not coincidental. IGF-I began to increase following one day of treatment (118%) and reached a plateau following the second day of treatment (140%). IGF-I remained at this increased plateau for the remainder of the six day treatment period. There was no difference between "adult" and "old" animals. In contrast, we observed no increase in IGFBP-3 in either group. However, IGFBP-3 was higher in "adult" animals as compared to "old" animals.

THE RELATIONSHIP BETWEEN ELEVATED FIBRINOGEN DURING HUMAN AGING AND AGGREGATION PROCESSES.

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The main aim of this study was to investigate the age dependent changes in fibrinogen and associated aggregation processes. For this investigation a sub-population from the Baltimore Longitudinal Study of Aging was chosen consisting of a cross-section of different ages of clinically healthy men and women not taking any prescription medication. We found a very significant rise in fibrinogen as a function of age in the total population(r = 0.78). This rise in the fibrinogen could be due to either excessive production or slow degradation. Fibrinogen is a high molecular weight protein and could affect a number of rheological and coagulation mechanisms including red cell and platelet aggregation. The erythrocyte sedimentation rate, corrected for plasma viscosity and hematocrit was found to be elevated in elderly(r = 0.5), indicating a state of hyperaggregability. We did not find any difference based on the gender. The results of this study indicates that fibrinogen may be one of the crucial factors contributing to a higher hypercoagulable state in elderly and may be associated with diseases more prevalent during in aged.

SEX HORMONE BINDING GLOBULIN, ESTROGEN, AND CARDIOVASCULAR DISEASE RISK IN MID-AGED WOMEN

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Past research has noted an association between cardiovascular disease (CVD) risk factors in women and sex hormone binding globulin (SHBG), an indirect indicator of androgenicity in women. Other studies have investigated changes in CVD risk factor levels at menopause, a time of declining estrogen levels. This study compares the association with CVD risk factors for SHBG and two measures of estrogen, estrone (E1) and estradiol (E2), in peri- and postmenopausal women. Data were taken from a population-based study of 351 Caucasian women aged 51-61 (mean age 54) with no concurrent use of exogenous hormones. CVD risk factors included SHBG, E1, E2, total cholesterol, high-density lipoprotein cholesterol, triglycerides, Apoprotein-A-I, Apoprotein B, systolic and diastolic blood pressure, and body mass index (BMI). The correlations of SHBG, E1, and E2 with the CVD risk factors were computed, before and after adjustment for other factors (age, smoking, exercise, and ethanol consumption). The log transformation was applied to the hormone variables, triglycerides, and BMI to handle skewness. Except for total cholesterol, the unadjusted correlation with CVD risk factors was stronger for SHBG than for either estrogen. Log E1 tended to be more highly associated with CVD risk factors than did log E2. Correlations ranged in magnitude from 0.12 to 0.44 for log SHBG, versus 0.02 to 0.22 for log E1 and 0.01 to 0.13 for log E2. Adjustment for covariates had little impact on these correlations. Thus SHBG, a marker of androgenicity, appears to be more strongly related to CVD risk factors in mid-aged Caucasian women than are measures of estrogen, which indicate menopausal status.

PROTEINURIA AND GLOMERULAR FILTRATION IN AGING MONKEYS: EFFECTS OF DIET RESTRICTION.

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Increased proteinuria is predictive of diabetic nephropathy in aging humans. We studied 27 rhesus monkeys (5 to 27 yrs old), including 8 normal lean monkeys (N), 7 normal obese (ObN), 12 obese hyperinsulinemic (ObHI), and 6 monkeys under long-term (>12 yrs) dietary restriction (DR; approximately 70% of ad libitum levels). Glucose tolerance and blood pressure were measured and 24 hr urine collections, for total protein excretion and creatinine clearance, the latter corrected for lean body mass, and used as an index of glomerular filtration rate (GFR). Results were:

Group	Protein (g/day)	GFR (ml/min/kg)
N	0.02±0.01	1.62±0.7
DR	0.02±0.01	1.91±0.6
Ob N	0.04±0.04	2.03±1.0
Ob HI	0.11±0.07	2.12±0.8

Proteinuria increased significantly with age ($r=0.44$) and insulin ($r=0.46$) (p's <0.05). ObHI monkeys compared to the N and DR had significantly greater proteinuria, plasma insulin levels and systolic blood pressure (p's ≤ 0.05). There were no significant differences in GFR. We conclude that in ad libitum fed monkeys, the development of obesity and hyperinsulinemia is associated with proteinuria and a trend toward increasing GFR, while these parameters remain normal in DR monkeys. These data support the value of DR to promote healthy aging in humans.

AGE- ASSOCIATED DIFFERENCES IN IMMUNOGENICITY TO INFLUENZA VACCINATION

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This study was designed as parallel-groups comparison of trivalent preparations of subunit-virus (SVV) and whole-virus influenza vaccine (WVV) in 44 healthy young (32 W and 12 M, mean age 30 years, range 22-40) and 47 healthy elderly (32 W and 15 M, mean age 72.6 years, range 65-85) people during the influenza season 1996/97. Serum samples was taken before vaccination (t0), after 4 (t1) and 12 (t2) weeks. Neutralising antibody was measured with Dowdle method and IL-2, IL-4 and IFNγ was measured with ELISA method after *in vitro* stimulation of peripheral blood mononuclear cell (PBMC) cultures with phythohemoagglutinins (PHA) and Flu antigens.

For the B and A/H1N1 vaccine antigens at t1 and t2 (only A/H1N1) neutralising antibody geometric mean titers were statistically significantly higher in young.

After *in vitro* stimulation with PHA, the elderly subjects showed a significant increase in IFNγ and IL-4 at t1 ($p<0.05$) while no differences were observed for IL-2 and for cytokines at t0 and t2.

Cytokines pattern was similar in young and elderly people after stimulation with flu antigens at t0, t1 and t2.

There was no difference in immunogenicity between SV and WV vaccine in young and elderly people.

These results suggest the cytokines pattern in elderly was Th0 like (↑ IL-4 and IFNγ) with high memory cells number

AGE DEPENDENT CHANGES AND TISSUE DISTRIBUTION OF PRESENILIN 1 EXPRESSION IN SENESCENCE ACCELARATED MICE (SAMP8) MICE.

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Mutations in Presenilin 1 (S182) gene are associated with Alzheimer's disease. The function of this protein is not well established. For this investigation, we have estimated the levels of expression and tissue distribution of Presenilin 1 in SAMP8 mice. SAMP8 mice have a median life span of 17.2 months as opposed to 24 months for their control litter mates (R1mice). This strain of mouse exhibits Alzheimer's related properties such as loss of memory, retention and increased expression of amyloid with age. Therefore, analysis of Presenilin 1 expression in these mice was performed by Western blotting technique. The results show that Presenilin 1 expression increased significantly (2-3 fold) from age 4 months to 8 months and decreased thereafter. Within the brain, amygdala, a region involved in memory, had the higher amount of expression compared to other regions. A comparison of its expression in liver, kidney, spleen pancreas and brain showed that Presenilin 1 expression was higher in all part of the brain than the other tissue. Among the tissues studied, liver showed the lowest amount of expression. Taken together, the results suggest that while Presenilin 1 may be present in all tissues, it may specifically play an important role in neuronal functions.

AGE AND THE REGULATION OF RENAL 1,25-DIHYDROXYVITAMIN D_3 PRODUCTION.

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The capacity of the kidney to produce 1,25-dihydroxyvitamin D_3 (1,25D), the active form of vitamin D_3, declines with age. This decreased renal production of 1,25D occurs despite the fact that serum parathyroid hormone (PTH) levels increase with age. Since PTH increases renal 1,25D production in young animals, this suggests that the capacity of PTH to stimulate renal 1,25D production declines with age. We have studied this in F344 rats by direct PTH administration and by feeding a low calcium diet, which elevates serum PTH. In thyroparathyroidectomized rats, the capacity of PTH to increase renal 1,25D production declined with age. Likewise, the capacity of the low calcium diet to induce renal 1,25D production declined with age. At the molecular level, we developed a ribonuclease protection assay to measure mRNA levels of CYP1a, the cytochrome P450 protein responsible for producing 1,25D. Renal CYP1a mRNA was elevated in young but not old rats by the low calcium diet. This suggests that the age-related decrease in renal 1,25D production may be due to decreased induction of cytochrome CYP1a by PTH with age.

EFFECTS OF AGE ON METABOLIC RESPONSES TO WEIGHT LOSS (WL) IN POSTMENOPAUSAL WOMEN

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This study determines whether age affects glucose and lipid risk factor responses to WL in healthy, middle-aged (MA, n=17, 54±2 yrs) and older (O, n=16, 67±3 yrs) postmenopausal women. At baseline, O women had a lower ($P<0.05$) body weight (80 vs 93 kg) and lean body mass (LBM, 39 vs 43 kg), but a similar % body fat (48%) and visceral fat mass (165 cm^2). There were no initial differences in risk factors between groups. Six mo of caloric restriction resulted in comparable losses of body weight (-7%) and visceral fat mass (-15%), with no decrease in LBM in either group. WL decreased ($P<0.05$) fasting triglyceride (-12%) and glucose (-5%) levels and insulin responses during a 3-hr oral glucose tolerance test (-21%) in both MA and O women, but increased HDL cholesterol (8%) and decreased glucose responses (-14%) only in MA women ($P<0.01$). The relative changes in glucose responses were different between groups ($P<0.05$). These results suggest that dietary-induced WL is beneficial for lowering triglycerides, fasting glucose and insulin responses in obese, postmenopausal women regardless of age. However, improvements in HDL cholesterol and glucose tolerance with WL may be blunted in older compared to middle-aged postmenopausal women.

RACE AND METABOLIC CARDIOVASCULAR (CV) RISK IN POSTMENOPAUSAL (PM) OBESE WOMEN.

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African-American PM women (AAW) have higher CV-related morbidity and mortality than Caucasian women (CW). We hypothesized that PM-AAW would have greater metabolic CV risk factors than CW of comparable age. We selected 22 AA and 42 C older (56 yr), obese (BMI > 27), sedentary, healthy women. Both groups had similar percentage body fat (48%) and waist-to-hip ratio (0.82), but AAW had greater BMI (35.3 vs 32.2 kg/m^2) and fat mass (44 vs 40 kg, $p<0.05$), and lower VO_2 max (18.6 vs 20.3 ml/kg/min, $p<0.05$) than CW. Visceral fat area was similar, but AAW had greater subcutaneous fat area (CT-scan, 551 vs 447 cm^2, $p<0.01$) compared to CW. Fasting and 2-hr glucose levels were similar, but fasting insulin levels were higher (104 vs 77 pmol/L, $p<0.01$) in AAW. Despite being more obese, AAW had lower TG (100 vs 132 mg/dl, $p=0.01$) than CW, but similar LDL-C and HDL-C levels. Thus, a lower exercise capacity, greater adiposity and higher insulin levels may increase CV risk in obese African-American women compared to Caucasian peers.

C_2 CERAMIDE PROTECTS AGED NEURONS FROM APOPTOTIC DEATH INDUCED BY WITHDRAWAL OF NERVE GROWTH FACTOR.

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Withdrawal of nerve growth factor (NGF) induces apoptosis in sensory neurons. We subjected isolated dorsal root ganglion neurons from young (Y:4-6 m), middle-aged (M:10-14 m), and old (O:22-28 m) Fisher 344xBN F1 hybrid rats to withdrawal of nerve growth factor x 24 h *in-vitro*, and measured % apoptosis with TUNEL staining + fluorescence microscopy. NGF withdrawal induced increased ($p< 0.01$) % apoptosis (Y:1.4±0.2; n=2, M:1.5; n=1, O:3.12±0.9 ; n=2), compared to neurons maintained in NGF (Y:0.35± 0.2; n=2, M:0.45; n=1, O:0.54 ±0.02; n=2), an effect most pronounced in aged animals. Addition of 20 μM C_2-ceramide decreased NGF withdrawal-induced apoptosis (Y:0.8± 0.05;n=2,M:0.3; n=1; O:1.51± 0.25; n=2), an effect not seen with inactive dihydro-C_2 (Y:1.35 ±0.08; n=2, M:1.9;n=1, O:4.22±0.66 ;n=2). In fact, a significant ($p<0.005$) increase in apoptosis in the aged group was observed with dh-C_2. A protective effect of C_2 was observed when aged neurons were subjected to NGF with-drawal in the presence of 20 μM TNFα (NGF+:5.5± 2.5; NGF-:12.0±1.5; NGF-/C_2:6.75±0.25; NGF-/dh-C_2:11.25± 2.75;n=2). The protective effect of C_2 on NGF withdrawal-induced apoptosis suggests that decreased neuronal ceramide in aging (Hall et al., Soc. Neurosci. 23:533,1997) may have pathophysiologic significance.

OUABAIN-LIKE FACTOR AND CARDIAC AGING IN MILAN HYPERTENSIVE RATS

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Ouabain-like factor (OLF), a circulating inhibitor of the Na-K pump, might act as a long-term regulator of volume and electrolyte homeostasis and may have a role in the development of hypertension and related organ damage.We aimed at investigating whether plasma OLF varies as function of the cardiac aging processes in rats of the Milan hypertensive strain (MHS).Plasma OLF concentration, measured by RIA, was significantly higher in MHS compared to age matched normotensive MNS rats, from the onset of hypertension (1 mo) to 3 mo (0.2±0.03 vs 0.07±0.01 nM, n=10; $p<0.05$).The expression of ANP, another regulator of cardiorenal homeostasis, increased with aging in LV tissue of both strains being higher in 3, 6 and 12 month-old MHS than in MNS. At these ages a progressive LV hypertrophy was observed in MHS rats.The stroke index (μl, on preload increase) and LVSP (mmHg/mg., on afterload increase) were significantly lower in MHS at 3 (SI=592±34; LVSP/LVW=175±11) and 12 mo (SI=409±22; LVSP/LVW=127±6) than in MNS (SI: 3mo=753±59, 12 mo=584±24; LVSP/LVW: 3 mo=231±8, 12 mo=190±16), whereas LV collagen content in MHS, estimated as hydroxyproline content and by specific staining, was not higher than in MNS at any age.In summary, at the onset of hypertension circulating OLF and the cardiac expression of ANP were higher in MHS and were associated with a progressive impairment of cardiac function and molecular and structural alterations. MURST, Tema 6 "Cardiomiopatia ipertrofica primitiva"

The gene for genetic hemocromatosis (HFE) and the iron status in Alzheimer's disease (AD).

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Because of its potential role in oxidative damage, iron has been proposed as a cause of neurodegeneration in AD. Hemocromatosis, a common disorder characterized by excess iron deposition in tissues and organs, has been associated with two mutations(Cys282Tyr, His63Asp) in the candidate gene of HFE. The aim of this study was to assess the presence of HFE mutations in AD patients, in order to asses whether a carrier state for hemocromatosis may affect the penetrance of the AD. We studied 64 AD patients (age 58-89, median 79yrs), and 128 controls (C) (age 20-48yrs,median 31yrs). In AD patients serum iron, ferritin and TIBC were determined. AD patients were also characterized for the Apo E genotype(allele prevalence: ε2=0.04,ε3=0.70,ε4=0.26). The two mutations of HFE were detected by PCR amplification of relevant exons and restriction with RsaI and BclI/MboI. Statistical analysis was performed by the Fisher's exact test. No significant differences were observed in the allelic and genotype frequencies of HFE mutants in AD and C(Table). The iron status of patients carrying HFE mutations was not different from that of patients with wild-type HFE genotypes. Although our results do not suggest a role of HFE in the pathogenesis of AD, further studies are needed to clarify the role of iron in neurodegeneration.

TABLE		AD (n = 64)	C (n = 128)
Alleles	Cys282Tyr His63Asp	2/128 (1.5%) 16/128(12.5%)	2/256 (0.7%) 33/256(12.8%)
Genotypes	Cys282/Tyr282 Tyr282/Tyr282	2/64 (3.1%) 0/64	2/128 (1.5%) 0/128
	His63/Asp63 Asp63/Asp63	14/64 (21.9%) 2/64 (3.1%)	29/128 (22.6%) 2/128 (1.5%)

AGE-RELATED CHANGES IN CARDIAC SARCOPLASMIC RETICULUM ARE UNLIKELY TO BE MEDIATED HORMONALLY.

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Aging is associated with impaired calcium handling by the cardiac sarcoplasmic reticulum (SR), but the cause of this decrease is unknown. The AT-1 cell line forms an implantable, well-differentiated tumor of atrial myocytes responsive to most hormones. We examined oxalate-facilitated calcium uptake by SR from tumors grown for 3 months in Young (3 month) and Old (30 month) female B6D2 F1 hybrid mice compared to that of their respective hearts. (* $p<0.05$)

Calcium Uptake Rates (nmol/mg/min)

	Young (n=5)	Old (n=5)
Heart Homogenate	24±2.4	18±1.4*
Tumor Homogenate	26±4.3	29±3.0
Isolated Tumor SR	240±27	260±28

Age-related differences in SR function were present in the homogenate of the Old hearts as expected, but SR from the tumors had no such decrement despite the AT-1 tumors exposure to circulating hormones that might modulate SR function.. Though the tumor SR may not demonstrate any age effect because they perform no hemodynamic work, other mechanisms may also be operant.

Calorie Restriction in Male Rhesus Monkeys Improves Risk Factors Associated with The Insulin Resistance Syndrome

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The insulin resistance syndrome, also known as Syndrome X, is a clustering of metabolic abnormalities including hypertension, hyperinsulinemia, hypertriglyceridemia and central obesity associated with increased cardiovascular risk. Previous studies from our lab and others suggest that long-term calorie restriction (CR) might have beneficial effects on several components of Syndrome X in monkeys. In the present study we assessed body composition, blood pressure, glucoregulation and serum lipids in adult (age 10-14 yr.) male rhesus monkeys (n=23) on CR for 9.25 years (long-term) and old (n=13) monkeys (age 22-25 yr.) during the initiation of CR. Long-term CR resulted in lowered insulin levels, and improved glucoregulation, including increased insulin sensitivity. Monkeys on long-term CR also weighed less, had less body fat and a lower trunk/leg fat ratio (T/L fat). We also studied serum lipids, glucoregulation, and body composition during initiation of CR. Measurements were made at baseline and following a 10, 20 and 30% reduction in food intake. During the short-term CR paradigm, we observed significant reductions in fasting insulin and glucose, and peak glucose and insulin during a glucose challenge. There were no significant effects on fasting glucose, blood pressure, or serum lipids. Body weight was slightly reduced during CR, but percent body fat and T/L fat were not changed. Our findings suggest that certain beneficial effects of CR may be independent of or synergistic with changes in body composition.

WHY DO OLDER ADULTS DECIDE THEY ARE HAVING DIFFICULTY WITH A TASK? UNDERLYING REASONS IN PEOPLE WITH ARTHRITIS

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Arthritis, a chronic and prevalent condition affecting more than 50% of people > 65 years, is associated with disability in functional mobility tasks. What is unclear is what aspects of the joint disease or resulting functional limitations are associated with the person's deciding that they are having difficulty with a task. The purpose of this study is to examine, in a cohort of older adults, the reasons cited for difficulty in performing functional mobility tasks in people who self-report arthritis, in comparison to people without arthritis. This was evaluated in cross-sectional analysis of data obtained in an observational study of 160 community-dwelling older adults. The age range was 59-85, with 22.5% with education <12 years. 56% reported arthritis; among these 66 or 74% reported difficulty with mobility tasks and 16 or 18% reported no difficulty but modification of task performance due to underlying disease. Among people without arthritis, only 23 or 44% reported difficulty with mobility tasks, and 21 or 40% reported no difficulty but modification of tasks. The most frequently cited reasons for difficulty among people with arthritis were having to cut back on task performance, such as getting less done or unable to do often. In contrast, people without arthritis were more likely to have report of task modification, such as having to do the task differently, associated with self-reported mobility difficulty. The findings suggest that people with arthritis perceive difficulty when they find themselves having to cut back on task performance, whereas people with other diseases perceive difficulty when they must modify their task performance, or perhaps reach a threshold where modification is no longer effective or sufficient. Overall, people appear to report difficulty in relation to events distal to the symptoms of the disease, and not the symptoms themselves.

USE OF MICROMANIPULATOR TO DELIVER SINGLE MINERAL FIBER TO SINGLE LUNG MACROPHAGE (CELL LINE NR8383) TO STUDY FREE RADICAL GENERATION.

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In humans, it is widely accepted that pulmonary function declines with age. Certain occupations and environments are known to be associated with pulmonary disease as sequela of inhalation of hazardous particulates. Various airborne particulates are ubiquitous to the general environment, and their inhalation is unavoidable. Retained particulates would be expected to accumulate over time. It has been established that certain particulates are associated with the generation of free radicals, whose sequelae include such lesions as fibrosis. In evaluating particulates for their predilection to generate free radicals, *in vitro* study offers some unique insight. To develop a model with the fewest variables, we are using a system wherein a single living attached cell (NR8383 macrophage cell line) can be exposed to a single fiber (erionite). The cells in a culture chamber are interfaced with an ACAS interactive laser cytometer. To administer a single fiber, a small number of fibers is deposited in the cell chamber at a distance from the selected cell. By using an Eppendorf micromanipulator, whose tip remains below the media surface, we visually select a fiber, transport it to the cell, release it and observe the process of phagocytosis. The options of observation of intracellular free radical generation and ultrastructural evaluation of similarly treated aliquots are thus available. The model offers the possibility of studying free radical generation with relevance to aging.

Effect of calorie restriction on bone mineral density and biochemical markers of bone metabolism in young, adult and older (premenopausal) female rhesus monkeys.

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The effects of calorie restriction (CR) on bone metabolism have not been extensively studied. In particular, little is known regarding effects of this nutritional paradigm in primate species. We assessed bone mineral density (BMD) at several skeletal sites in ad libitum-fed and CR female rhesus monkeys (n=55) of different ages (range 3.5-23.5 yr.) over a period of 3 years during long-term CR. Also, biochemical markers of bone metabolism were assessed at various times during the 3-yr study. A companion study (see Handy et al.) monitored reproductive cycling and hormones over the same period. Baseline data collected when monkeys had been on CR for 3 yr. showed that BMD was generally reduced in restricted monkeys, compared to controls. However, the effect was not statistically significant. Follow-up studies 3 years later showed that BMD remained slightly lower in CR monkeys, compared to controls, but the effect was significant only at the mid radius site. The percentage change in BMD over 3 years did not differ between control and CR monkeys. This was true in young monkeys whose BMD increased and in older (premenopausal) groups of monkeys with evidence of bone loss over the 3 years. Vitamin D, serum calcium, and a serum marker of bone resorption (ICTP) declined with age in controls, but were not altered by CR. In addition, CR had no effect on serum phosphorus and osteocalcin, a serum marker of bone formation. The slight reduction in BMD at selected skeletal sites observed in CR monkeys cannot be explained by disruption of calcium homeostasis or by altered bone turnover.

A GENETIC ANALYSIS OF LOWER EXTREMITY FUNCTION IN ELDERLY MALE TWINS FROM THE NHLBI TWIN STUDY.

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A short battery of physical performance tests was used to investigate the contribution of genetic and environmental influences in 95 monozygotic and 93 dizygotic twin pairs, age 69 to 80 when tested. Balance, gait, and endurance were evaluated by examining participnats' ability to perform tandem positions, time to walk 8 feet, and time to complete 5 chair rises. Categories of performance were created for each test and then summed in a performance scale. Genetic analyses conducted on each test separately indicated significant heritability of 46% and 42%, respectively, for the chair stand and walking speed tests. No evidence for significant heritability was indicated for performance on standing balance tests. Of particular importance is the finding that while evidence for genetic influences was indicated for the entire spectrum of functioning (estimated heritability 56% for the summary performance score of all tests combined), genetic influences contributed primarily at the low end of the functional spectrum whereas shared environmental influences contributed at the high end (i.e., in those who showed almost no disability).

These results suggest that genetic influences may play an etiologic role in physical functioning of older persons especially in those at the lower end of the physical functional spectrum.

Aging and Calorie Restriction in Female Rhesus Monkeys: Reproductive Cycling and Hormones

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Calorie restriction (CR) extends maximum and mean lifespan, slows the rate of aging, and reduces or delays the onset of many age-related diseases in laboratory rodents. The effects of long-term CR on the reproductive axis, however, have not been well defined. In rodent studies, CR reduces peak cyclical estradiol and peak and overall progesterone levels. CR in rodents also delays the age-related onset of oligomenorrhea and preserves the number of ovarian follicles. Our study was designed to monitor several reproductive indices during CR in 60 female rhesus monkeys in three age groups [J (1-4 yr.), A (5-9 yr.), O (>18 yr.)]. Daily observations of menstrual cycles were performed over a 3-year period, and blood samples were taken once a year at approximately day 5 of the menstrual cycle and analyzed for estradiol, progesterone, LH and FSH. Estradiol, but not progesterone, declined with age in controls. LH showed no significant change with age. FSH was elevated in some, but not all older monkeys and the correlation with age was not significant. CR did not induce significant hormonal changes in any of the age groups. CR also did not alter the total number of cycles nor the average intermenstrual interval. However, CR monkeys did exhibit less normal (24-31 day) length cycles, compared to controls. The physiological impact of CR on normal cycle length is unclear. However, CR does not significantly alter reproductive hormones.

ENHANCED INHIBITION OF FREE RADICAL-INDUCED DEOXYRIBOSE BREAKDOWN BY ALZHEIMER BRAIN HOMOGENATES.

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Several lines of evidence indicate that oxygen-derived free radicals may play a role in pathogenesis of Alzheimer's disease (AD). In this study, we have compared the ability of homogenate from Alzheimer and control brains to inhibit formation of thiobarbituric acid reactive products (TBAR) induced by free radicals. The assay for TBAR was modified by adding 1% sodium dodecylbenzenesulfonate (SDS) to prevent chromogen adsorption by biological matrices, and by extending the incubation time. The inhibitory effect of the homogenates was expressed as mg of protein which inhibited TBAR formation to the same extent as 0.208 mmoles of sodium salicylate. Three brain areas from 12 Alzheimer and 8 control brains were used: amygdala, temporal cortex and cerebellum. The inhibitory activity was similar in all three brain areas and required smaller equivalents of Alzheimer brain homogenates (0.16 - 0.18 mg of protein) than control homogenates (0.27 - 0.29 mg of protein). The inhibitory activity was similar in brain homogenates from individuals with different apolipoprotein E status. These results indicate that Alzheimer brain tissue has either increased content of free radical scavengers or is more sensitive to free radical attack than control brains. (Supported by USPHS PO1-AG0001, AG-09301 and by the Department of Veterans Affairs).

SURGICAL REMOVAL OF VISCERAL FAT IN AGING RATS REVERSES HEPATIC INSULIN RESISTANCE.

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Increased intraabdominal adiposity is typical in humans aging, and is a risk factor for diabetes and arteriosclerotic disease. We have demonstrated that its decrease may determine some of the effects of caloric restriction on glucose homeostasis in aging rats (JCI April 98, Barzilai et al.). To directly test whether visceral fat (VF) modulates hepatic insulin action, Sprague-Dawley rats were randomized either to a surgical removal of both the epididymal and perinephric fat pads (VF-; n=6), or to a sham operation (VF+; n=8). At the time of the study (~3 weeks later), total fat mass (by ^{3}H2O) was similar in the both groups. However, while VF weighed 2.1±0.3 g in the VF- it was 4 fold increased (8.5±1.2 g, p<0.001) in the VF- group. To estimate hepatic insulin sensitivity, hepatic-pancreatic clamp was employed and the rates of insulin infusion required to maintain plasma glucose levels, and hepatic glucose production (HGP; ^{3}H-3-glucose) was 0.57±0.02 in VF- and 1.22±0.19 mU/kg/min in VF+ (p<0.001). While the plasma insulin levels required to maintain plasma glucose levels and HGP at their basal levels was more than 2-fold higher in VF+ (p<0.001), plasma FFA, glycerol, and glucagon levels were similar in both groups. Different gene expression of the fat-derived peptide leptin and TNF-alpha were demonstrated in VF compared with subcutaneous fat. We conclude that surgical extraction of VF (which accounts for ~10% of total fat) enhances hepatic insulin action by more than 2 fold. This effect on hepatic insulin sensitivity could not be accounted for by changes in the availability of glycerol and/or FFA, and may be accounted by differential expression of fat-derived peptide. These results provide direct evidence for a causal role of increased visceral adiposity and altered glucose homeostasis with aging.

THE EFFECTS OF AGE AND BODY COMPOSITION ON SERUM LEPTIN LEVELS IN RHESUS MACAQUES.

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Serum leptin concentration is positively correlated with body fat content. The effect of advancing age upon the relationship between leptin and body fat is not well known. In this experiment, 115 adult rhesus macaques (60 females, 55 males) ranging in age from 4 to 34 years old were evaluated for body composition and leptin concentrations. Body composition was determined by dual-energy x-ray absorptiometry. Serum leptin was measured in single fasted morning blood samples. Results indicate no sex difference in the way age interacts with leptin and body fat, allowing sexes to be pooled for further analysis. Pearson product moment correlations showed leptin to be highly correlated with indices of body fat (total fat, r=0.802; %fat, r=0.783; abdominal fat, r=0.801; thoracic fat, r=0.778). Multiple regression analysis showed an increase in leptin with age(p=0.0008), and an interaction between leptin and total body fat with age (p=0.006). This study confirms previous findings of a close relationship between circulating leptin levels and indices of body fat. In addition, this experiment shows that in rhesus monkeys, the relationship between leptin and body fat is not influenced by gender, but does change with advancing age. (Supported by NIH grants AG11915 and RR00167.)

INCREASED EXPRESSION OF PKR PROTEIN KINASE IN AGING MICE

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The cellular response to environmental stress involves translational control mechanisms that function to repress mRNA translation, which over time, can effect the aging process. One of the key regulators of the mRNA translation rate in mammalian cells is the dsRNA-activated protein kinase, PKR. As part of an investigation of PKR and aging, we evaluated, using Western immunoblots, the expression of PKR system gene products in tissues from five 2 month old and five 20 month old B6D2F1 mice. PKR was detected in all tissues examined from aging mice but generally not in tissues from young mice, suggesting an age-related change. $P58^{IPK}$, the cellular inhibitor of PKR, was expressed in tissues from both groups but to a greater extent in aging mice, suggesting an upregulation to control PKR activity. eIF-2α, the phosphorylation substrate of PKR and a well-characterized factor for initiating protein synthesis, was expressed to a lesser degree in tissues of aging mice compared to young mice, suggesting a decrease in translational activity. We conclude that PKR may be a factor in the reduction of the rate of protein synthesis during senescence, possibly to conserve cellular resources.

BS-8

High-throughput gene expression analysis in mice subject to caloric restriction. G.S. Gerhard and E. Kauffman, Department of Pathology, Penn State College of Medicine, Hershey, PA 17033

Alteration of gene expression has been proposed as a key molecular mechanism underlying the life span modulating effects of caloric restriction (CR) in rodents. Of the genes that have been studied to date, CR appears to exert specific effects on specific genes; with the advent of cDNA expression arrays, large-scale gene expression profiling is now possible. We have analyzed steady state gene expression in liver from 6 month old C57BL/6 mice fed at 60% of the ad libitum (AL) calorie intake beginning at 2 months of age using a cDNA array containing 588 mouse genes (Clontech, Palo Alto, CA). Among 80 of the most highly expressed genes, approximately 20 exhibited similar expression in CR and AL mice, while about 30 were increased and 30 were decreased. The effects of CR on the expression of most of these genes have not yet been reported. We do confirm previously published decreases in the hepatic mRNA expression of the ERp72, Grp78, and IGF-1 genes, no change in beta-actin, and an increase in the expression of HSP84. Further analysis of the data is ongoing as is extension to other genes, tissues, and ages. We are using these data to create a gene expression database to facilitate the identification of key genes whose altered expression may underlie the effects of CR.

VITAMIN B12 DEFICIENCY RELATIONSHIP BETWEEN CLINICAL SIGNS AND ELEVATED SERUM METABOLIC MARKERS. Garcia, A.[1], Lehotay, D[2], Ebrosky, J[2], Cole, D[2], Freedman, M[3]. 1. Division of Geriatrics, Queen's University. 2, Department of Biochemistry, University of Toronto. 3, Department of Medicine, Baycrest Centre for Geriatric Care, University of Toronto, Ontario, Canada.

Vitamin B12 (B12) deficiency is common among the elderly. Moreover, the prevalence of metabolic evidence of B12 deficiency (elevated Methylmalonic Acid (MMA) and Homocysteine (HCYS)) is even higher in this population. The clinical significance of elevated MMA/HCYS is unclear, but these determinations have been proposed as possible substitutes of B12 serum levels, for the clinical assessment of B12 status. To investigate the clinical significance of elevated MMA/HCYS in the absence of low B12, we have conducted a pilot study of 85 senior volunteers, with normal B12 levels, living in the community. Clinical history and physical examination of all participants was done by a geriatrician, and blood taken for B12, Folate, Hb, MCV, peripheral smear, creatinine, BUN, MMA and HCYS. Signs and symptoms assessed were: Neurological exam including cranial nerves, motor (strength, tone), sensory (light touch, vibration and proprioception), reflexes and cerebellar exam, gait, tongue changes, signs of depression and gastrointestinal symptoms. Thirty eight participants had elevated MMA and 51 had elevated MMA and HCYS (metabolic deficit of B12). The demographic characteristics of the group with metabolic deficit of B12 were similar to the normal group. Signs associated with clinical B12 deficiency were equally found in the normal group and in the groups with metabolic B12 deficiency. The highest MCV was 105 among the normal group and 103 in the high metabolites group. These results suggest that metabolic B12 deficiency is not associated with the classical clinical signs of B12 deficiency.

AN ANALYSIS OF BODY WEIGHT AND HEMODIALYSIS ADEQUACY BASED ON THE UREA REDUCTION RATIO

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The goal of this study was to conduct an epidemiological investigation of inadequate dialysis risk, comparing overweight hemodialysis (HD) patients to all other patients using the urea reduction ratio (URR) as the outcome of interest. A simple random sample (n = 315) of HD patients from 96 dialysis providers in four Midwestern states. Using a retrospective cohort design, the sample was divided into quartiles based on post-dialysis body weights with a cut-off value at the upper 25th percentile which was equal to ≥ 81 kilograms (kg). The dichotomous outcome of interest was a URR ≥ 65 % (i.e. adequate hemodialysis) and a URR < 65 % (i.e. inadequate dialysis). Those in the ≥ 81 kg group were given more dialysis session time in minutes and used higher efficiency dialyzers (Kuf), yet were more likely to have URRs < 65% compared to other patients in the sample ($p \leq 0.001$). Patients weighing ≥ 81 kg experienced an increased risk of inadequate dialysis when compared to all others (OR 4.02, 95% CI 2.217-7.29). Patients who are overweight may experience inadequate dialysis despite longer, more efficient dialysis sessions. Although technologies need to be developed to provide adequate HD to this group of patients, it is recommended that nurses assist patients with voluntary weight loss through appropriate referral to a renal nutritionist.

FOOD RESTRICTION DIFFERENTIALLY AFFECTS mRNAs ENCODING THE MAJOR PITUITARY TROPIC HORMONES IN AGING MALE F344 RATS

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Because neuroendocrine mechanisms may govern some of the anti-aging effects of food restriction (FR), we measured the effect of FR on the mRNAs encoding 5 tropic hormones of the anterior pituitary (AP) -- all important neuroendocrine markers. Slot blot hybridizations were done on AP RNA samples obtained between 0400 and 2130 h from 3, 6, 12, 18 and 24 mo.-old rats fed ad libitum (AL) or FR (60% of AL calories) since 6 wk. of age. Because time of sampling had no influence, results, normalized to ug total RNA, were pooled across times. Pro-opiomelanocortin (POMC) mRNA was higher in FR than in AL rats at all ages. Levels of follicle stimulating hormone β mRNA were similar in AL and FR rats at 3, 6 and 12 mo., but

thereafter rose in FR rats and fell in AL rats. In FR rats, growth hormone (GH) mRNA levels were stable across the life span and were lower than in AL rats at 3, 6 and 12 mo. Because GH mRNA fell with age in AL rats, GH mRNA levels in AL rats fell below levels in FR rats between 13 and 15 mo. and remained lower in AL rats thereafter. Prolactin mRNA levels were stable across the life span in FR rats, but rose progressively in AL rats from 12 mo. onward. Thyroid stimulating hormone (TSH) β mRNA levels were lower in FR than AL rats from 3 to 18 mo., but then fell in AL rats at 24 mo. to a level lower than in FR rats. This complex, gene- and age-dependent effect of FR on tropic hormone gene expression suggests a highly regulated and altered neuroendocrine milieu in FR rats, and offers new probes for understanding the altered metabolic and anti-aging status of the FR animal. (Supported by NIA)

EVALUATING CANDIDATE BIOMARKERS OF AGING: A LOGICAL APPROACH.

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In light of the increasing number of proposed anti-aging therapies and strategies, it is important to develop objective criteria to assess whether or not aging rate can be altered. As an outcome variable, lifespan may be of limited value in determining if aging has been altered in humans and other long-lived species. Development of valid and reliable biomarkers of aging may help reduce the present need for lifespan studies in assessing anti-aging treatments. We have described previously a logical approach for evaluating candidate markers of aging in rhesus monkeys. This process assesses both cross-sectional and longitudinal associations with chronological age and evaluates the stability of individual differences over time. We have reported on the possible utility of several candidate biomarkers of aging in rhesus monkeys from our colony at NIA. In the present study we report our initial efforts to develop a database of candidate markers of aging in nonhuman primates. We assessed several serological markers in rhesus monkeys using pooled data from colonies at the NIA and the University of Wisconsin. While several candidates emerged from this pilot study, serum albumin was the most robust, meeting all selection criteria and being neither gender- nor colony-specific. This study demonstrates the possibility of utilizing existing primate data to evaluate candidate biomarkers of aging. We are currently expanding the database to include data from other primate species from a variety of primate centers.

THE GENETIC BASIS FOR HUMAN LONGEVITY REVISITED: THE ANCESTRY OF A NORWEGIAN-AMERICAN CENTENARIAN.

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Curiosity about the hereditary transmission of longevity has been rekindled by interest in Jeanne Calment, who died last year in Arles, France, at the age of 122 years and 164 days. Researchers J.-M. Robine and M. Allard compared average length of life of 55 of her immediate ancestors (68.2 years) with that of 55 controls living in the same place and time (57.7 years). They found no simple hereditary transmission of longevity but an "extraordinary concentration of long-living individuals, especially on her paternal side," and hypothesized that Jeanne's longevity was "largely genetic in origin and...due to an exceptional genetic inheritance, randomly accumulated within the ecological niche of Arles in the 18th and 19th centuries" (*Science* **279**:1834-1835).

The present research focuses on ancestors of a near contemporary of Jeanne Calment who was born in Norway in 1868. Pauline Jørgensdotter emigrated to central Illinois at age 16 and died there at age 102, having raised seven children, six of whom lived past 70; one daughter still lives independently at 94. Pauline and her six siblings (median age at death, 90 years) were descended from farmers and fisherfolk who lived on a small island near Stavanger in southwestern Norway. Birth and death dates have been determined for 54 ancestors reaching back five generations; their mean age at death was 64.9 years (67.2 for males, 62.4 for females) despite numerous deaths in childbirth and by drowning. As with the French data, the highest concentration of long-living individuals was on the paternal side (mean longevity, 66.1 years). Unlike Jeanne Calment, however, Pauline Jørgensdotter's genetic inheritance was not randomly accumulated: 30 individuals (or 56% of the sample) were descended from a common male ancestor, reported to be 90 years old in 1621.

To determine average longevity for contemporaries of the same region, controls with similar marriage dates will be paired with all 54 individuals in the sample. Birth and death dates are being sought for ancestors' siblings to permit an estimation of narrow-sense heritability of longevity.

VASOREACTIVITY OF RAT AORTA CAN BE ALTERED USING VIRAL EXPRESSION VECTORS.

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Age-related impairment in beta-adrenergic (ßAR) vasorelaxation occurs in humans and animal models. Current data suggest this is due to impaired Gsα coupling to adenylyl cyclase. We examined the ability of constituitively activate Gsα to restore vasorelaxation using viral-mediated gene delivery. A constitutively active mutant of Gsα, Q227L was created and cloned into a herpes simplex viral (HSV) expression vector, Q227L-HSV. Aortic rings from 6 month, male, Fischer-344 rats were exposed to Q227L-HSV (227) or control (C) vector for 48 hr in organ culture. We found that infection of aortic rings with 227 resulted in a marked reduction in maximal phenylephrine-induced contraction (2.1 vs 0.6 gms, n=4, p=0.015). There was also an enhancement of maximal isoproterenol-mediated relaxation (56 vs 64%, n=4, p=0.04). Furthermore, we found depressed forskolin-stimulated cAMP accumulation. These data demonstrate that viral-mediated gene delivery of constituitively active Gsα alters vascular reactivity/cAMP accumulation in rat aortic rings, and that organ culture with expression vectors can be used to better understand the change in vasorelaxation with aging.

AN INVESTIGATION INTO THE MITOCHONDRIAL DNA REPAIR CAPACITY OF FIBROBLASTS AS A FUNCTION OF DONOR AGE

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The steady state level of oxidative damage in mitochondrial DNA has been reported to increase with age. This may be due to an age related decrease in the mitochondrial DNA repair capacity. To investigate this

possibility, photoactivated methylene blue was used to induce the oxidative DNA lesion 8-oxo-dG in the mitochondrial DNA of cultured human skin fibroblasts from young (20-30 years) and old (≥ 80 years) donors. At various times throughout the following 24 hours, lesions were quantitated using the Escherichia coli formamidopyrimidine-DNA glycosylase (Fpg) in a gene specific damage and repair assay. Preliminary results indicate that vigorously dividing cells are capable of repair regardless of donor age, but that cells with low replicative capacity have less efficient repair of damage to their mitochondrial DNA.

GONADOTROPIN RELEASING HORMONE (GnRH) BINDING IN LUNG CANCER

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GnRH binding to the pituitary or other tissues, such as the ovary and testis, has been described. We are reporting here the existence of specific GnRH binding to membranes isolated from small cell cancer of the lung in old humans. The plasma membranes were obtained by differential centrifugation on discontinuous sucrose gradient. ^{125}I-GnRH binding was measured following the incubation of the isolated plasma membrane aliquots in 0.1M Tris-Hcl buffer, pH 7.4 at 37°c, and separation of bound from free by centrifugation. After incubation for 30 min. with 10-9 M GnRH, the calculated binding to the tumor membranes was 0.57± 0.04 fmol/μg protein. In comparison, the binding of GnRH to membranes from human lung tissue was 0.14± 0.02 and from pituitary 1.78 ± 0.08 fmol/μg protein. The binding kinetics were further studied regarding concentration and time dependence. We concluded that the binding characteristics of GnRH to small cell lung cancer membranes may suggest the presence of receptors structurally altered or incomplete. Their functional significance is unclear, but it could be related to some of the feminizing signs, such as gynecomastia, observed with these tumors.

MECHANISMS OF IMPAIRED MIGRATION IN AGED ENDOTHELIAL CELLS.

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Angiogenesis is impaired in aged tissues and contributes to delayed wound repair. Decreased angiogenesis is due, in part, to slowed migration of aged human microvascular endothelial cells (hmEC). Movement of hmEC within the extracellular matrix (ECM) requires attachment, adhesion (attachment followed by spreading), and detachment. These processes are regulated by integrins and their associated focal contacts, the actin cytoskeleton, and the activity of matrix metalloproteases (MMPs). Our objective is to define the mechanism(s) of impaired migration in aged hmEC. HmEC were obtained from pooled foreskins and aged *in vitro*. Aged hmEC were defined as those at >75% of their *in vitro* lifespan (34 doublings). Young hmEC (<12 doublings) served as controls. Migration, attachment, and adhesion on collagen I were quantified. HmEC were examined for cell surface expression of $\alpha 2\beta 1$ (the major integrin receptor for collagen I). Focal contacts and the actin cytoskeleton were examined by immunoflourescence with an anti-phosphotyrosine antibody and phalloidin. MMP1 (interstitial collagenase) and its inhibitor, tissue inhibitor of metalloprotease 1 (TIMP1), were measured by zymography and western blots. Relative to young hmEC, aged hmEC showed a 40% decrease in the distance migrated over 4days. Attachment to the ECM (mediated primarily by $\alpha 2\beta 1$) was reduced by >40% in aged hmEC and adhesion was delayed by 36%. Levels of cell surface $\alpha 2\beta 1$ integrin were similar in both groups of cells. Aged hmEC demonstrated a disorganized actin cytoskeleton with fewer stress fibers, but similar levels of activated signaling proteins, at sites of attachment to the ECM (focal contacts). Aged hmEC showed decreased MMP1 expression, but increased levels of TIMP1. We conclude that impaired migration in aged hmEC is not due to decreases in the expression of the $\alpha 2\beta 1$ integrin, although integrin activation may be delayed. Aged hmEC have a disordered actin cytoskeleton, but no detectable differences in the activation of signaling molecules that regulate formation of focal contacts. In addition, we found that aged hmEC have decreased MMP1 at the same time that levels of TIMP1 are increased, resulting in a net decrease in protease activity. These deficits lead to impaired migration and contribute to delayed wound repair in aging.

AGE-RELATED CHANGES IN DYNAMIC MEASURES OF EEG ACTIVITY

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Animations of the changing patterns of voltages across the surface of the scalp can be generated to represent the dynamics of EEG. However, comparisons of these voltage maps across age groups and task conditions are problematic because of the difficulty in quantifying the observed pattern of change. We quantified a single aspect of these voltage maps by tracking changes in the location of the highest squared voltage among the electrode sites. Running EEG was obtained at 128 electrode sites from 16 younger and 16 older adults while they (a) performed a continuous performance task and (b) sat quietly with their eyes open and closed. The number of changes per second in the location of the highest squared voltage was found to be significantly higher in older adults than in younger adults. The results are interpreted to indicate that younger adults are more likely than older adults to display voltages across the surface of the scalp that vary in-phase with each other. The possibility of an age-related decline in the coordination of cortical functions during cognitive task performance is discussed.

CHANGES IN APOPTOSIS OF POLYMORPHONUCLEAR GRANULOCYTES WITH AGING

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It is well known that apoptosis is playing an important role in several diseases. Our aim was to study the apoptosis of polymorphonuclear granulocytes (PMNLs) in aging under several stimulations, as the apoptosis might play a role in several pathologies encountered with aging. The PMNLs of healthy young (20-25 yrs) and elderly (65-x yrs) were studied for apoptosis after 18 hours of sterile culture without or with stimulation. The

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agents used were: PMA, FMLP, G-CSF, GM-CSF, GSH, LPS, IL2. The apoptosis was assessed by Giemsa staining of the plates, by DNA ladder and by flow cytometric staining. It was found that without stimulation the susceptibility of PMNLs to apoptosis was slightly increased with aging. The GM-CSF was not able to rescue the PMNLs of elderly from apoptosis. This seems to be related to the altered signal transduction pathway elicited by GM-CSF (Jak2 and Stat 5) in PMNLs of elderly subjects. These changes in apoptosis of PMNLs with aging could play a role in certain pathologies of aging.

Modulation of Superantigen T Cell Proliferative Response in Young in Elderly. SC Castle, K Uyemura, W Crawford, T Makinodan, West Los Angeles GRECC, UCLA, LA, CA.

It has been previously reported that the impaired proliferative response of peripheral blood mononuclear cells (PBMC) from elderly subjects is associated with both increased IL-10 (promotes a T helper 2, or Th2 response) & IL-12 (promotes a Th1 response). In developing a mechanistic approach towards immunomodulation, we needed to resolve whether the impaired PBMC proliferative response was related to shifts in sensitivity to IL-10 or IL-12.

We determined the effect, in a dose response manner, of rIL-10/rIL-12 & antiIL-10/ antiIL-12 (neutralizing antibody) on the proliferative response of PBMC to stimulation with a superantigen Staphylococcal entertoxin B in 4 healthy elderly (E) & 4 young (Y) controls. Mean proliferative response of E had a decrease of 28% vs. Y ($p<.03$). While E maintained lower proliferation, the slopes of the Log dose-response curves for rIL-10 & 12 were not different (rIL-10: $r^2>.9$ for Y & E, $p>.9$ for difference in slope by ANOVA; rIL-12: $r^2>.79$ for Y & $>.98$ for E, $p>.8$ for difference in slope) suggesting no difference in the sensitivity to these regulatory cytokines. Experiments with neutralizing antibodies showed essentially identical curves for antiIL-12, but a significant enhancement to antiIL-10 across the dose response in E, with a mean peak increase response of 36% ($p<.004$ vs. lowest dose), while the increase response in Y was unchanged across the dose range ($p>.1$). While the impaired proliferative response of the elderly was restored to that of the young by either boosting the Th1 response (rIL-12) or blocking the Th2 response (antiIL-10), there was an enhanced differential response to antiIL-10 in the elderly. Hence, age-related impaired proliferation of PBMC is primarily due to increased IL-10. (Work supported by DVA Research Service, Merit Review)

OXIDATIVE STRESS IN AGING VERSUS DISEASE: A SYSTEMATIC ANALYSIS

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It is well established that oxygen radicals are a major endogenous toxin in human tissue, and that they are generated principally as a side-effect of aerobic respiration. It is also known that they are prone to initiate chain reactions in lipids, proteins and nucleic acids, and that the oxidised macromolecules which are thus formed are themselves pro-oxidant, exacerbating the effect of the original oxygen radicals. However, there remains much dispute regarding the detailed mechanisms whereby the body's antioxidant defences become increasingly overwhelmed by these toxins during aging. In addressing this pivotal question, it is instructive to consider the body's reaction to oxidative stress during disease and convalescence, which differs considerably from that during aging. A systematic analysis of the literature has been undertaken, and reaches the novel conclusion that models of age-related oxidative stress based on a mainly autocatalytic "vicious cycle" are not well supported. Rather, the evidence appears to indicate that accumulation of permanently irreparable changes (such as DNA damage or lipofuscin accumulation) is the main determinant of oxidative stress during aging.

EFFECTS OF TWO YEARS OF DIETARY RESTRICTION ON INSULIN RECEPTOR mRNA SPLICING IN LIVER OF RHESUS MONKEYS. Ze Huang[1, 2], Richard Weindruch[1, 2], Joseph Kemnitz[1]. [1]Wisconsin Regional Primate Research Center, University of Wisconsin, Madison, WI 53715, and [2]GRECC, Veterans Hospital, Madison, WI 53705

Background: Dietary restriction (DR) increases insulin sensitivity and improves glucose tolerance and retards many age-related diseases, including diabetes. Insulin receptor (IR) plays a pivotal role in glucoregulation. There are two IR isoforms, derived from alternative splicing of exon 11 of IR gene, named Exon 11 minus (Exon 11-) and Exon 11 plus (Exon 11+) IR. Previously we have reported that IR mRNA splicing is altered in muscle and liver tissues of spontaneously obese and diabetic rhesus monkeys (Huang, et al. J Clin Invest 94:1289 1994; J Clin Endo Metab 81:1552 1996). In muscle, increased expression of Exon 11- IR is associated with hyperinsulinemia and in liver, it is associated with hyperglycemia and age. Our findings indicate that an increase in Exon 11- IR may be detrimental and contribute to insulin resistance in diabetes and age-related decline in glucose tolerance. Objective: To explore potential mechanisms of the beneficial effects of DR on glucoregulation, we studied IR mRNA splicing in liver of monkeys subjected to a 30% restriction in caloric intake for two years. Hypotheses: DR may reduce expression of Exon 11- IR in liver, which may be associated with decreased fasting glucose by DR in these monkeys. Methods: Liver biopsies were obtained from 8 DR and 8 Control (C) monkeys aged 9-17 yr from a longitudinal study of DR and aging. Monkeys are characterized semi-annually in terms of body composition and multiple indexes of glucoregulation by the Modified Minimal Model method. The IR mRNA splicing variants were measured by a reverse transcription-PCR method (expressed as % Exon 11- IR). Results: After 2 yr of DR, R monkeys have significantly lower levels of body fat (9±2% vs. 21±4%, X±SEM, $P<0.01$), lower fasting insulin (14± 3μU/ml vs. 47±16 μU/ml, $P=0.06$) and lower fasting glucose (56 ±2 vs. 63±2 mg/dl, $P=0.07$) than C. The levels of Exon 11- IR in liver of 16 monkeys range from 17 to 41% (26±2%). Unexpectedly, the R monkeys tend to have higher Exon 11- IR levels compared to C, although no significant difference was found between R and C groups (27±3% vs. 24±1%, $P=0.2$). No correlation was found between ratios of the Exon 11- IR in liver and fasting glucose (ranging from 52 to 75 mg/dl) and age (ranging from 9 to 17 years). Conclusion: Our results suggest that 2 yr of DR or reduced fasting insulin and glucose by DR appears not to influence IR mRNA splicing in liver in this group of early middle aged monkeys, predominantly with euglycemia and normo-insulinema. Longitudinal studies of IR mRNA splicing and gluco-regulation in this group, as well as in a group of older monkeys after 6 yr of DR, with a wider range of fasting glucose and insulin, are now underway. (Supported by NIH grants AG11915 and RR/AG00167)

Inhibition of T Cell Senescence in WRN Tg Mice

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Werner's syndrome (WS) is an inherited disease with clinical symptoms which resemble premature aging. Previous studies have shown that T cells undergo both the functional and phenotypic changes with aging. These changes are characterized by the accumulation of memory T cells and defects of apoptosis. We previously show that upregulation of Fas throughout the lifetime of the animal inhibits the accumulation of senescence T cell. Also, the T cell lines from patients with Werner's syndrome exhibit defected apoptosis associated with Fas apoptosis pathway. We have cloned the mouse equivalent of the human Werner's Syndrome (huWRN) gene and analyzed its role in young and aged mice as well as CMV-moWRN transgenic mice. The results show that the moWRN gene exhibited increased expression during apoptosis induced in response to removal of the IL-2 growth factor from cultured CTLL cell lines as well as increased expression after DNA damage induced by treatment of mice with cyclophosphamide for 1 week in vivo. The CMV moWRN

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transgenic mice exhibited features of T cell senescence including higher activation induced cell death of spleen T cell resulting in decreased proliferation after anti-CD3 stimulation in WRN transgenic mice. These findings unify previous observations of apoptosis defects of the immune system that occur with aging, and the relationship between Werner's syndrome gene and the apoptosis process. Analysis of the mouse WRN gene should shed new insights into the function of the WRN gene in mice and human, and provide basic insights into the molecular mechanism of aging.

FOOD RESTRICTION ELEVATES SERUM MELATONIN LEVELS THROUGHOUT THE LIFESPAN OF MALE FISCHER 344 RATS

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Recent evidence indicates that melatonin can reduce oxidative stress, enhance immune function and may extend median lifespan of rats and mice. Short term food restriction of rats increases circulating melatonin concentrations, and limited evidence indicates that chronic food restriction may also elevate nocturnal melatonin concentrations. We therefore measured serum melatonin concentrations by RIA throughout the lifespan of rats fed ad libitum (AL) or FR (60% of AL calories) since 6 wk of age. Plasma was collected by decapitation within 10 sec of cage disturbance to ensure against stress-related effects. Samples were taken at 0430, 0930, 1330, 1530, 1730 and 2130 h (lights on: 0530h; off: 1730h) in 3, 6, 12, 18 and 24 mo-old rats (n=30 for each age and treatment). As expected, melatonin concentrations varied with time of day ($P<0.001$, ANOVA), peaking in all groups between 2130 and 0430h. Levels were lowest and unchanged between 0930 and 1730h. Levels were 15-20% higher in FR rats than in AL rats at all times ($P<0.01$). Melatonin levels did not change during aging in either group ($P=0.17$), and there were no significant interaction effects. The higher serum concentration of melatonin in FR rats is consistent with the purported anti-aging actions of melatonin. However, the modest elevation of melatonin in FR rats coupled with the fact that FR seems to have comparable anti-aging effects in mutant mouse strains unable to synthesize melatonin suggest that, while it could play some role, melatonin is not essential to the anti-aging effect of FR. (Supported by NIA)

FAS AND FAS LIGAND EXPRESSION IN THE PITUITARY GLAND - EFFECTS OF AGING AND DIETARY RESTRICTION ON THE REGULATION OF APOPTOSIS -

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The regulation of apoptosis is associated with aging as well as tumorigenesis. We have reported that aging accelerates but dietary restriction (DR) suppresses apoptosis-related Fas expression on rat hepatocytes. The present study investigated the effects of dietary restriction on aging-dependent changes in Fas and Fas ligand (FasL) expression in anterior and posterior lobes of the rat pituitary gland (AP and PP respectively). With aging, the levels of Fas-mRNA, measured by the RT-PCR method, did not alter in AP, while increased in PP. The levels of FasL-mRNA were decreased in AP, while augmented in PP. DR diminished the aging-dependent change on the FasL-mRNA levels in PP. The present study suggest the followings; 1) that aging differentially affects the regulation of apoptosis between AP and PP, 2) that DR exhibits the anti-aging action, at least, in the regulation of apoptosis in PP.

Expression of Fas and Bcl-2 in lymphocyte subsets of aging African American population.

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Previous studies have shown that expression of Fas and Bcl-2 genes in T lymphocytes of Caucasians are altered in aging. These T cells are more susceptible to apoptosis due to the increased expression of the pro-apoptotic gene Fas and a decrease in the expression of the anti-apoptotic gene Bcl-2 compared to young controls. We studied the expression of Fas and Bcl-2 in T cell subsets and B cells of older ($\geq$ 65 years) African American inner city dwellers. Peripheral blood samples were incubated with FITC-labeled anti-Fas and PE-labeled anti-CD4, CD8 or CD20. Expression was determined by dual-color flow cytometry. To determine Bcl-2, cells were stained first with PE-labeled anti-CD4, CD8, or CD20, then permeabilized and intracellular Bcl-2 was determined using FITC-labeled anti-Bcl-2. Our initial results showed no significant difference between the young and old subjects in Fas expression in T cell subsets CD4, CD8 and B lymphocytes. However, there was an increase in expression of Bcl-2 in the T cell subsets in the old subjects. These results suggest that there may be a genetic difference in the regulation of apoptosis in different racial population.

INOSITOL TRANSPORT INTO YOUNG AND OLD RPE CELLS:IN VITRO MODELS OF DIABETES AND AGING.

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Complications of diabetes and aging, may have shared physiological basis. Age-related macular degeneration (AMD) has been associated with changes in physiology of retinal pigment epithelial cells (RPE). Active transport of myo-inositol (MI), sensitive to glucose, inhibitors of ion transport systems, and pH gradients, was established in RPE cultures (Khatami, et al. 1988 a, b, 1990, a, b). Present report compares the influence of aging and glucose on transport of ^{3}H-MI into

RPE. Cells were grown in DMEM containing 5 (normal) or 40 mM D-glucose, or 40 mM αMG, for upto 2 (young) or 5 (old) wks. Capacity of RPE to accumulate MI ([MI]i/[MI]o), decreased by upto 41% or 34%, when cells were grown in 40 mM glucose or αMG, respectively, compared with cells grown in normal media. MI uptake was decreased by upto 25%, when cells were kept in normal media for 4-5 wks (old). No difference in cell number was noted between young and old cells. An 18% reduction in ^{3}H-thymidine incorporation into DNA occurred when cells were grown in 40 mM glucose. Imposition of pH gradients [PH_i (6.1)<PH_o (8.1)], which stimulates Na^+/H^+ exchanger, reduced MI accumulation into young and old cells, by upto 21% and 34%, respectively. AMD may be associated with changes in ionic transport activity/membrane integrity of RPE. Comparable physiological mechanisms (e.g., decreased ATPase and/or increased exchanger activities) may be operative in diabetes, and aging.

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UTILITY OF CSF-NTP ASSAY IN THE DIAGNOSIS OF ALZHEIMER'S DISEASE: A FOLLOW-UP STUDY

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This study was carriedout to demonstrate the utility of AD7C-NTP assay in the diagnosis of Alzheimer's disease (AD). AD7C-NTP is a 41 kD protein present in neurons which is selectively upregulated in AD brain and is associated with the pathology of the disease. *In situ* hybridization and immunostaining studies have localized AD7C-NTP gene expression in neurons. Over-expression of AD7C-NTP in transfected neuronal cells promotes neuritic sprouting and cell death. Using an enzyme linked sandwich immunoassay (ELISA) constructed with antibodies to the recombinant protein, AD7C-NTP levels have been measured in cerebrospinal fluid (CSF) samples from cases of AD as well as age matched normal controls and a variety of neurological disease controls. In order to assess the utility of AD7C-NTP measurements in the diagnosis of AD, patients whose CSF were analyzed by the AD7C-NTP assay were followed up for 6 months or more by 51 physicians throughout the United States. Of the overall group of patients and controls studied, 58% had AD7C-NTP levels consistent with AD. Of the patients who tested AD7C positive, 100% had a clinical evolution and diagnosis after 6 months consistent with AD; of the patients who had a clinical evolution and diagnosis after 6 months consistent with AD, 84% tested AD7C positive; of the patients who either showed significant cognitive improvement without drug therapy or who were subsequently diagnosed as non-AD by other clinical methods 100% were AD7C negative. The results of this independent follow-up study confirms the importance of AD7C-NTP assay in AD diagnosis and its relevance to the treatment of the disease.

MELATONIN: DOES IT ALTER BOTH GSH AND SOD IN DROSOPHILA melanogaster?

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This purpose of this research was to determine: (1) if Superoxide Dismutase (SOD) and Glutathione (GSH) levels could be increased with supplemental melatonin; (2) if SOD and GSH levels would be dependent on melatonin concentration; and (3) if the same mathematical relationship exists between SOD level and melatonin, as with GSH level and melatonin.

Drosophila were divided into two groups: control and experimental. Flies in the experimental group were given three concentrations of melatonin (.01g, .02g, and .04g melatonin/sample) through their food. Flies were euthanized, then macerated after 21 days. Tissue samples were divided into two groups. Group 1 was mixed with cold water and centrifuged. The supernatant was collected and assayed for SOD, using standard reagents and spectrophotometric analysis. Five percent metaphosphoric acid was added to Group 2. A sample was prepared for analaysis as with Group 1, using GSH reagents and spectrophotometric analysis. SOD and GSH levels were calculated. Graphical analysis of melatonin concentration to SOD and GSH was completed and compared.

Results for average SOD were as follows: Control, 15.70/mg; .01 concentration, 36.67/mg; .02 concentration, 73.67/mg; and .04 concentration, 246.867/mg. The average GSH was: Control, 96/uM; .01 concentration, 100.5/uM; .02 concentration, 106/uM; and .04 concentration, 118.5/uM. These numbers show melatonin increases both SOD and GSH in Drosophila melanogaster, and the SOD and GSH are dependent on melatonin concentration. Results indicate that although both SOD and GSH increase melatonin concentration, their mathematical relationship to melatonin is slightly different.

Finalist in Gerontology, 1998 Intel International Science and Engineering Fair.

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ADVERSE OUTCOMES AFTER HOSPITAL DISCHARGE IN ELDERLY HOME CARE PATIENTS: THE FALLS AFTER HOSPITAL DISCHARGE STUDY

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Participants:

M.A. Sager (Univ of Wisconsin, Madison, WI); Impact of Hospitalization on Function and Mobility.

J.H. Johnson (Home Health United, Madison, WI), J.E. Mahoney, M.A. Sager,, M. Palta; Rate of Falls and Associated Injuries After Hospital Discharge.

J.E. Mahoney (Univ. Of Wisconsin, Madison, WI), J.H. Johnson, M.A. Sager, S. Park, M. Palta; Risk Factors for Falls After Hospital Discharge.

S.L.Gray (Univ. Of Washington, Seattle, WA), J.E. Mahoney, D Blough; Incidence of Adverse Drug Reactions After Hospitalization and Associated Risk Factors.

J.G. Eisner (Univ. Of Wisconsin, Madison, WI), T. Havighurst, M. Palta, J.E. Mahoney; Increased Risk for Adverse Outcomes in Patients Who Live Alone.

Discussant:

R. Palmer (Cleveland Clinic, Cleveland, OH)

Older adults frequently decline in function with hospitalization, and may be at high risk for adverse outcomes following hospital discharge. Patients who require home nursing services after hospitalization represent a more disabled subset that may be at particularly high risk. Unfavorable outcomes after hospitalization include falls, adverse drug reactions, admissions to long-term care facilities and failure to recover function. This symposium will present data from the Falls After Hospital Discharge Study, a cohort study of 312 older adults discharged from the hospital after acute medical illness and receiving home nursing services after discharge. Individual presenters will discuss findings from the study of a high rate of falls after hospitalization; risk factors for falls during this period; incidence of, and risk factors for, adverse drug reactions; and incidence of functional impairment, nursing home placement, and lack of recovery of function for patients who live alone. Discussion will highlight potential interventions to improve function, and decrease the incidence of falls and other adverse outcomes during this high-risk period.

IMPACT OF HOSPITALIZATION ON FUNCTION AND MOBILITY

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Acute illness and hospitalization frequently result in functional decline for older adults. This presentation reviews complications of hospitalization, including bedrest, iatrogenic infections, and adverse drug events, that contribute to functional decline in older adults. The incidence of functional and mobility decline with hospitalization, based on studies such as Hospital Outcomes Project for the Elderly, will be reviewed. Many older adults do not recover function and mobility when they return home after discharge. Data from previous studies showing the trajectory of recovery of function and mobility will also be reviewed. Older adults who are functionally impaired after hospitalization may be at high risk for complications in the post-hospitalization period. This presentation will review potential explanations for hospital-associated functional decline, and will discuss some of the reasons that complications occur after hospital discharge.

RATE OF FALLS AND ASSOCIATED INJURIES AFTER HOSPITAL DISCHARGE

J.H. Johnson, J. Mahoney, M. Sager, M. Palta, Home Health United, Madison, WI 53704.

Hospitalization may increase the fall risk in frail older adults. The purpose of this study was to determine the rate of falls in elderly patients requiring home nursing services after hospital discharge and to analyze the injuries and health care services which were initiated as a result of falling. 312 patients with a mean age of 80 were followed prospectively for falls for 3 months after hospitalization. Falls were ascertained by weekly postcards and chart review of hospital records. All positive reports of falls were followed up by phone interview to verify the fall, any injury and subsequent health care utilization. 14.7% of the sample fell in the first month after discharge with 66 falls occurring in 46 people. The rate of falls in the first two weeks was 6.4 per 1000 person-days and decreased to 1.3 per 1000 person days by 14 weeks. 11% of falls in the first month resulted in serious injury requiring hospitalization. Injuries due to falls accounted for 15% of all hospitalizations in the first month after discharge. Serious injury included fractures of the ankle, pelvis, spine and arm. The 7 hospitalizations totalled 29 hospital days and resulted in 3 subsequent nursing home admissions totalling 70 days. Results from this study point out a high risk for falls, particularly during the first month home from the hospital.

RISK FACTORS FOR FALLS AFTER HOSPITAL DISCHARGE

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Risk factors for falls in the post-hospitalization period have not been well studied. We wished to determine if patients with risk factors for falls prior to hospitalization would be predisposed to a high rate of falls after discharge. 312 patients were assessed in the home within 5 days after hospital discharge for self-report of pre-hospital mobility, function, overall health, and fall risk factors. Cognition and vision were assessed by objective measures. By Poisson regression, risk factors for an increased rate of falls in the three months after discharge were male sex, vision worse than 20/100, and the following pre-hospital characteristics: lightheadedness with standing, use of a wheeled walker or standard walker, daily alcohol intake, vigorous exercise more than once a month, and 2 or more falls in the year prior. For patients with a previous history of falls, the rate of falls increased as cognition decreased. In general, presence of the risk factor was associated with increased risk compared to absence of the risk factor for all points in time after hospital discharge, with the risk being greatest in the early post discharge period. Patients at high risk for falls after hospitalization can be identified by predisposing risk factors. It may be important to target high risk patients for in-hospital and post-hospital interventions to prevent falls.

ADVERSE DRUG EVENTS (ADEs) IN ELDERLY HOME HEALTH PATIENTS FOLLOWING HOSPITAL DISCHARGE

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Hospital discharge is marked by many medication changes, but little is known about risk of adverse drug events in the post-discharge period. We assessed incidence, health-care consequences, and risk factors for adverse drug events in the month following hospital discharge. Baseline information collected within 1 week of hospitalization included demographic factors, medical diagnoses, drug use, cognition, and physical function. Patients were revisited 1 month later to determine the occurrence of ADEs. Of 256 patients (mean age 80.0 yrs, 63.7% female, 96.5% Caucasian), 52 patients experienced 64 possible (n=23), probable (n=37) or definite (n=4) ADEs.. The most common ADEs involved the gastrointestinal tract (31.3%) and central nervous system

(51.3%). Of ADEs reported to providers (n=53), 59% of drugs were discontinued or altered. One ADE resulted in hospitalization. In logistic regression, females (OR=2.26, 95% CI 1.06-4.77) and the interaction between number of new medications and cognition were significantly associated with ADEs. The risk of an event increased with number of new drugs at discharge; however risk was higher for patients with lower cognitive scores. ADEs were common in the month following hospital discharge, were more frequent in women, and often resulted in medication changes. Patients at particular risk were those with lower cognitive scores who were discharged with several new medications.

LIVING ALONE AFTER HOSPITALIZATION: ASSOCIATED DISABILITY AND ADVERSE OUTCOMES

J.G. Eisner, J.E. Mahoney, T. Havighurst, M. Palta
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Older adults who live alone and receive home nursing services after hospital discharge may be at increased risk for adverse outcomes. The purpose of this study is to describe the deficits in function and mobility in participants in the Falls After Hospital Discharge Study who lived alone after hospitalization, and to examine the association of living alone with adverse outcomes of nursing home placement and lack of improvement in activities of daily living. Of the 312 patients enrolled in the study, 171 (55%) lived with someone following hospitalization and 141 (45%) lived alone. Of those who lived alone, 39% were dependent on others to perform one or more activities of daily living at discharge, 51% needed assistance with meals and 40% used an assistive device. Among those dependent in ADLs at discharge (n=130), patients who lived alone were at 3 times increased risk for not improving in function, after adjusting for age, cognition, and discharge function (p=.01). In the month after hospitalization, 7.2% of those who lived alone were admitted to a nursing home compared to 3.1% of those who lived with someone. Adjusting for age, cognition, and discharge function, those who lived alone were 3.5 times more likely to enter a nursing home (p=.05). Older adults who live alone after hospital discharge and receive home nursing services frequently have a significant burden of dependency in ADL's and may be at higher risk for not recovering function and being admitted to a nursing home in the month after discharge.

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UNDERSTANDING THE PATHWAY FROM DISEASE TO DISABILITY: THE WOMEN'S HEALTH AND AGING STUDY

J.M. Guralnik, National Institute on Aging, Bethesda, MD, L.P. Fried, Johns Hopkins University, Baltimore, MD

Participants:

L.P. Fried, K. Bandeen-Roche, (Johns Hopkins Medical Institutions, Baltimore, MD) J.M. Guralnik. Preclinical disability among those disabled: Evidence for its meaningfulness in identifying those with intermediate levels of impairments.

S.G. Leveille, J.M. Guralnik, (National Institute on Aging, Bethesda, MD) M.C. Hochberg, R. Hirsch, L. Ferrucci, T. Rantanen. Low Back Pain and Disability in Older Women.

T. Rantanen , J. M. Guralnik (National Institute on Aging, Bethesda, MD), R. Sakari-Rantala, S. Leveille, E. Simonsick, S. Ling, L. P. Fried. Disability, Physical Activity and Muscle Strength in Older Disabled Women.

S.M. Ling, B. Johnson, P. Gregory, L.P. Fried (The Johns Hopkins University School of Medicine). Determinants of Knee Osteoarthritis-associated Disability.

J.M. Guralnik (National Institute on Aging, Bethesda, MD), S. Stabler, L. Ferrucci, S. Kittner, L.P. Fried, the Impact of Vitamin B12 Deficiency on Impairments, Functional Limitations and Disability.

Discussant:

S. Studenski (University of Kansas Medical Center)

Much has been learned about demographic characteristics, diseases, and behavioral risk factors associated with disability, but the intricacies of the pathway leading from disease to disability is not well understood. Ultimately, prevention of disability will depend not only on disease prevention but interventions on factors along this pathway in those who already have chronic disease. The Women's Health and Aging Study screened a representative population of women aged 65 years and older to recruit the one-third most disabled women living in the community. A comprehensive baseline interview and examination assessed a wide range of factors that measured different steps on the pathway from disease to impairment to functional limitation to disability. This symposium will consider the relationships of several components of the pathway to illustrate the kinds of insight that can be developed from this approach.

Persons reporting no disability in a specific task may report that they have modified the way they do this task. Evidence will be presented that demonstrates that functional limitations are more severe in those who report these modifications compared to those who have no disability or modifications. The interrelationships of musculoskeletal conditions, pain, strength and physical activity and how they affect disability will be addressed in several papers. B_{12} deficiency is common in older disabled women and even within this population has an impact on the severity of impairments, functional limitations, and disability.

Preclinical disability among those disabled: evidence for its meaningfulness in identifying those with intermediate levels of impairments.

LP Fried, K Bandeen-Roche, J Guralnik. Johns Hopkins Medical Institutions, 2024 E. Monument St. Suite 2-600, Baltimore, Md 21205.

Preclinical disability appears to be a meaningful stage that precedes the development of mobility disability and is associated, in nondisabled people, with higher disease burden and impairments than in those who do not have such preclinical changes in function. However, it is not known if people who already have difficulty in some tasks could be preclinically disabled in others, and if so, if this represents increased impairment. If so, this may be a marker of those at increased risk for progression of disability into new tasks. This talk presents data addressing these questions in the Women's Health and Aging Study I, a prospective study of 1,002 women $\geq$ 65 years who represent the 1/3 most disabled older women living in the community. Results indicate that a substantial proportion of these disabled women report modification of task performance (an indicator of preclinical disability) in tasks in which they report no difficulty. Specifically, among this moderately to severely disabled population, the % who report no difficulty in a task but modification are: walking up stairs: 28%; transfers: 22%; lifting 10 lbs.: 26%; meal preparation: 16%; bathing and dressing: each 23%. Modifications of mobility tasks are associated with increases in impairments in balance, walking speed, exercise tolerance and pulmonary function that are intermediate between those disabled in the task and those with neither difficulty nor modification. These findings may be markers of those at risk of progression of difficulty, and suggest threshold levels of impairments beyond which individuals experience disability and dependency.

LOW BACK PAIN AND DISABILITY IN OLDER WOMEN

S.G. Leveille, J.M. Guralnik, M.C. Hochberg, R. Hirsch, L. Ferrucci, T. Rantanen, Epidemiology, Demography, and Biometry Program, National Institute on Aging, Bethesda, MD 20892.

Low back pain is a highly prevalent chronic condition, yet little is known about the disabling effects of this problem in older adults. Among 1002 disabled older women participating in the Women's Health and Aging Study, 42% reported that they had low back pain for at least one month in the year before baseline. The prevalence of severe back pain decreased markedly with age (10% of those $\geq$ 85y versus 23% in each of two younger age groups). Other factors associated with back pain included less education and higher body mass index. Medical conditions associated with back pain included osteoarthritis of the hip and knee, and disc disease or spinal stenosis. After adjusting for age, weight and height, back pain was associated with poorer performance in several measures of function, including usual pace gait speed, repeated chair stand time, knee extension and hip flexion strength, and ability to lift a 10 pound weight. Balance measures were not associated with back pain. There was a strong relationship between severity of back pain and difficulty with daily activities. After adjusting for health and demographic factors, women with severe back pain were 3 to 4 times more likely to have a lot of difficulty with light housework or shopping. Similarly, there was an increased likelihood of difficulty with mobility or basic activities of daily living among those with severe back pain. The findings were not materially altered after adjusting for knee strength and gait speed, indicating an independent effect of pain on disability. These findings point to the need for much more attention by clinicians and researchers to the very disabling effects of low back pain in older adults.

DISABILITY, PHYSICAL ACTIVITY AND MUSCLE STRENGTH IN OLDER WOMEN: THE WOMEN'S HEALTH AND AGING STUDY.

T. Rantanen[1], J. M. Guralnik[1], R. Sakari-Rantala[2], S. Leveille [1], E. Simonsick [1], S. Ling [3], L. P. Fried [3]. [1]Epidemiology, Demography and Biometry Program, NIA, NIH, Bethesda, MD, [2] Dept of Health Sciences, University of Jyvaskyla, Finland, [3]Johns Hopkins Medical Institutions, Baltimore, MD

The aim of this research was to study associations of motor disability, physical activity and muscle strength in older women, in particular to investigate whether a model of spiraling decline is expressed in the data. Cross-sectional analysis was done using data from the baseline measurements of The Women's Health and Aging Study (WHAS). Participants were 1002 mildly to severely disabled women aged 65 years and older living in the community. Disability was measured by self-report. Level of physical activity was determined from response to a series of questions on the frequency and amount of doing common activities and physical exercise. Hand grip and knee extension forces were measured using portable hand held dynamometers. Disability and physical activity were inversely associated, with inactivity being most common among the most disabled women. Those with poorer strength reported more difficulties in motor activities. Greater strength was found among the physically more active. In stratified analyses, the positive association of physical activity on knee extension strength was consistent across disability levels. Multiple regression analysis showed that both physical activity and muscle strength were significant predictors for severity of disability. Structural equation models (LISREL) showed that muscle strength had a mediating role between physical activity and disability: disability was associated with physical inactivity which correlated with lower muscle strength which was associated with greater degree of disability. Even though causality cannot be confirmed in this cross-sectional analysis, our findings suggested a spiraling model of decline in which muscle strength plays an important role.

DETERMINANTS OF KNEE OSTEOARTHRITIS (KOA)-ASSOCIATED DISABILITY.

S.M. Ling, B. Johnson, P. Gregory, L.P. Fried. The Johns Hopkins University School of Medicine, 5505 Hopkins Bayview Circle, Baltimore MD 21224

Knee osteoarthritis (KOA) is known to contribute to mobility difficulty. Definition of the specific features of OA that contribute to this difficulty would help improve management of this common and often disabling condition, and prevention of resulting disability.

Purpose: This study evaluates the independent contributions of specific features of KOA to mobility difficulty in older women.

Methods: The Women's Health and Aging Study II is study of community dwelling women ages 70-80 years who were either mildly or not disabled at the time of recruitment. 436 women were evaluated with a standardized interviewer-administered questionnaire that included arthritis-specific symptoms and self-reported mobility measures and examination including knee extension strength, and physical performance measures of mobility.

Results: The 55 women with KOA reported greater difficulty with mobility tasks than did the remainder of the sample without KOA. Those with KOA had lower knee extensor strength ($p<0.05$), and required more time to walk 4 meters and stand from a seated position 5 times. In multivariate analyses, knee extensor strength was predictive of walking speed, while strength and pain severity were significant in models for self-reported mobility difficulty. History of mobility difficulty and modification were associated with medication use for arthritis, while walking speed was not. Presence of stiffness, swelling or tenderness, age, educational level and depression score were not significant predictors of mobility measures.

Conclusions: KOA-associated mobility disability appears to be a function of associated muscle weakness and pain, but not other OA-related manifestations.

THE IMPACT OF VITAMIN B_{12} DEFICIENCY ON IMPAIRMENTS, FUNCTIONAL LIMITATIONS AND DISABILITY.

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Vitamin B_{12} deficiency has been found to be very common in older persons when diagnosed with sensitive techniques. The clinical manifestations of severe B12 deficiency have been well described for patients identified in the clinical setting. There is limited data on the prevalence of B_{12} deficiency in the community and little information is available about functional consequences of B_{12} deficiency uncovered in this way. This study uses data from the Women's Health and Aging Study, a prospective epidemiologic study of the one-third most disabled women living in the community. B_{12} deficiency was defined as serum cobalamin < 200 pg/ml, methlymalonic acid (MMA) >271 nmol/L, and MMA > total methlycitric acid. Compared to those without B_{12} deficiency (n=579), those with B_{12} deficiency (n=121) were significantly older (79.5 vs. 76.8 yrs.), a higher proportion were white than black (87.6% vs. 68.7%), but they did not have more chronic disease (4.3 versus 4.2 diseases). Measures of impairment significantly worse in those with B_{12} deficiency included grip strength, knee extension strength, functional reach, and vibration sensitivity. A timed pegboard test, usual and fast gait speed, measures of functional limitations, were slower in those with B_{12} deficiency. Finally, disability, as represented by ADL dependency, was 1.7 times (95% confidence interval 1.0-3.0, p=.07) more likely in those with B_{12} deficiency, after adjusting for age, race, specific diseases, and serum albumin. B_{12} deficiency has an impact on all steps of the pathway from disease to disability, an important finding since this is a treatable condition.

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GERIATRIC RESEARCH EDUCATION AND CLINICAL CENTER (GRECC) SYMPOSIUM I: APPLIED EXERCISE SCIENCE IN FRAIL AND HEALTHY ELDERLY.

D.T. Lowenthal, Gainesville VAMC GRECC, Gainesville, FL.

Participants:

K.L. Perell (West Los Angeles VAMC GRECC, Los Angeles, CA) Effects of Bicycle Exercise on Muscle Strength and Walking Abilities in the Subjects with CVAs.

J. Robbins (Madison VAMC GRECC, Madison, WI) Lingual Isometric and Swallowing Strength in the Elderly: Is intervention warranted?

S.A. Carney (Salt Lake City VAMC GRECC, Salt Lake City, UT) Successful Rehabilitation of Demented Patients After Hip Fracture.

J.O. Ciocon (Miami VAMC GRECC, Miami, FL) Effect of a Wellness Program in Elderly with Fatigue as a Significant Symptom.

M.C. Morey (Durham VAMC GRECC, Durham NC) Spinal Flexibility Plus Aerobic vs. Aerobic Only Training: Effects of a Randomized Clinical Trial on Function in Older At-Risk Adults.

Physical activity has effected a major influence on the well-being of the healthy and frail elderly by helping them maintain and develop a degree of functional independence, reversing many cardiovascular risk factors, decreasing fatigue and symptoms of depression and improving bone density and muscle strength in men and women. The effects of bicycle exercise on muscle and walking abilities in subjects with CVAs improves muscle strength and greater ability to walk faster and to bear weight on the involved leg. Similar benefits of rehabilitation accrue in demented patients after hip fracture reducing the long-term complications of immobility. Lingual pressure reserve for swallowing declines with age. The tongue helps to initiate swallowing. The relationship between maximal lingual strength and swallowing lingual strength has been shown to be indicative of "functional reserve." Resistance exercises appear promising for treating dysphagia and for possibly preventing age-related changes in swallowing. In addition to aerobic and strength training programs, flexibility is a third dimension which must be included in training of the healthy and frail elderly. More gains in physical function and health are obtained in supervised programs with moderate aerobic exercise than in home-training maintenance programs.

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METABOLIC ALTERATIONS IN YOUNGER AND ELDERLY OBESE PATIENTS WITH TYPE 2 DIABETES

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We conducted this study to assess the metabolic alterations in younger and elderly obese patients with type 2 diabetes. Healthy controls (C) (young N=9, age: 42±2 yr, BMI: 33± 1; old N=10, age: 71±1 yr, BMI: 29±1 kg/M^2) and patients with type 2 diabetes (D) (young N=11, age: 43±2 yr, BMI: 34±2 kg/M^2; old N=23, age: 73±1 yr; BMI: 30±1 kg/M^2) underwent a 3 hour glucose tolerance test, a 2 hour hyperglycemic glucose clamp and a 3 hour euglycemic glucose clamp study with tritiated glucose methodology to measure glucose production (Ra) and disposal (Rd) rates. Younger and elderly were similar in percentage of body fat. Insulin responses during the OGTT were similar in elderly D and C but were less in younger D than C (305±49 vs 690±136 pm, $p<0.01$). Second phase (80-120 min) insulin values during the hyperglycemic clamp were similar in elderly D and C, but were less in younger D than C (282±35 vs 894±143pM, $p<0.0001$). During the euglycemic clamp, basal (3.03±0.10 vs 3.69±0.09 mg/Kg LBM/min, $p<0.0001$) and steady state (150-180 min)(0.72±0.10 vs 1.84±0.20 mg/kg LBM/min, $p<0.0001$) Ra values were less in younger C than D but were similar in elderly C and D. Steady-state Rd values were higher in C than D in both the younger (7.51±0.85 vs 4.62±0.24 mg/kg LBM/min, $p<0.01$) and old (9.91±0.61 vs 6.78±0.60 mg/kg LBM/min. $P<0.01$) groups. We conclude that type 2 diabetes in obese younger subjects is characterized by an impaired glucose induced insulin release, altered regulation of Ra and resistance to insulin mediated Rd. In contrast, the primary defect in elderly obese patients with type 2 diabetes is resistance to insulin mediated Rd.

DOES A RELATIONSHIP EXIST BETWEEN SERUM LIPID-STATUS, ATHEROSCLEROSIS AND MORTALITY IN THE ELDERLY?-THE BERLIN AGING STUDY (BASE)

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Associations between serum lipid status, prevalence of atherosclerotic disease and 3-year all-cause mortality were investigated in the representative sample of the longitudinal Berlin Aging Study (N=516, 70-103 years old).

Univariate statistical analyses showed that total cholesterol as well as LDL-cholesterol did not differentiate participants with atherosclerotic disease (56.6% of the sample) from atherosclerotic free people (43.4%). However, lower HDL-cholesterol, higher total cholesterol/HDL-cholesterol ratios (Chol/HDL), as well as elevated fasting triglycerides were associated with vascular disease. Multivariate analyses revealed age as the strongest predictor of vascular disease ($p<0.001$), whereas the vascular risk factor Chol/HDL >5 was positively associated with atherosclerosis ($p<0.01$). Significant associations were also found for coronary heart disease, peripheral vascular disease and lipoprotein(a) values exceeding 30 mg/dl. The 3-year mortality rate was found to be age-related and higher in people with vascular disease (39.4% vs. 21.0%).

Analysis of the causal relationship presupposed between an unfavourable lipid profile and an increased prevalence of atherosclerotic disease and then between atherosclerotic disease and mortality revealed that age, male gender and atherosclerosis are significant predictors for 3-year mortality. Since lipid levels of Chol/HDL >5 and lp(a) >30mg/dl were found to be associated to vascular disease and since atherosclerosis is a strong and independent predictor of mortality, these findings lead us to the conclusion that even in a heterogenous population of old and very old people the impact of lipid risk parameters on mortality seem to be mediated by vascular disease.

DIAGNOSIS OF OSTEOPOROSIS IN MALES.

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Introduction: The incidence of osteoporosis in men is one quarter of that in women. Previous surveys have reported that between 63-78% of men with osteoporosis have identifiable causes or secondary osteoporosis (Ringe et al 1981, Peris et al 1995, Kelepouris et al 1995).

Methods: From the Bone and Metabolic Disease Clinic at Johns Hopkins Bayview Medical Center, a retrospective chart review was made of all males seen at the clinic and confirmed to have osteoporosis by chart review and by bone mineral density measurements, > 2 standard deviations below normal peak bone mass. Patient screening included history, physical exam, dual energy x-ray absorption (DEXA), serum alkaline phosphatase, calcium, phosphate, albumin, testosterone, and 25OH vitamin D.

Results: Of these charts, 96 men were identified with an average age of 52 years. At presentation to the clinic, 46/96 (48%) reported a fracture prior to evaluation. Of the fractures reported, 19 had known spinal fractures, 2 hip fractures, 2 radius fractures, and 23 reported fractures at other sites. At initial evaluation, 23/96(24%) had pain, with 21 reporting back pain. Hearing loss was reported on initial evaluation of only one patient. Of the 96 patients, 53 (55%) were diagnosed with idiopathic osteoporosis (IOP). Of the 43 diagnosed with secondary osteoporosis, 23 had steroid induced osteoporosis (SIOP), 10 had osteogenesis imperfecta (OI), 4 had testosterone deficiency, and 2 had hyperparathyroidism. Crohns disease, hypopituitarism, and anticonvulsant use each accounted for diagnosis in one patient

Discussion: This relatively high percentage of IOP may be secondary to selection bias of physicians to refer patients with normal screening exams or possibly an increased vigilance in diagnosis of osteoporosis in men. As awareness grows about treatment of osteoporosis in men and women, more patients with IOP may be diagnosed and treated to prevent fractures.

SMALL LONGITUDINAL CHANGES WITHIN THE NORMAL SBP RANGE PREDICT THE DEVELOPMENT OF CHD.

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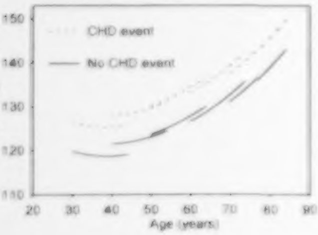
Although hypertension is a major risk factor for coronary heart disease (CHD), little is known about whether the **patterns of change** in systolic blood pressure (SBP) in years preceding the development of CHD have potential predictive value. Thus we biennially examined longitudinal changes in SBP and the development of CHD over a mean follow-up time of 8.1 (range 1 to 30) years in 1029 males of the Baltimore Longitudinal Study of Aging (BLSA), free of CHD at the beginning of the study. Subjects taking medications that could affect SBP were excluded. During this period, 192 participants (18.7%) developed CHD, defined by either angina pectoris (Rose criteria), myocardial infarction, by history or by pathologic Q-waves on resting electrocardiogram or sudden cardiac death. The graphic illustrates the predictive longitudinal changes of SBP, via linear mixed effects model, during 15 years of follow-up for different starting ages and CHD levels. Prior to clinical evidence of CHD, and independent of age, SBP was constantly higher (6.6 mm Hg on average, p<0.001) in those who would develop CHD than those who did not during the follow-up period. The relative risk of developing CHD relative to SBP, (proportional hazards regression model controlling for age, body mass index, blood cholesterol and cigarette smoking) indicates that a 6.6 mm Hg increase in SBP portends a 14% increase in the risk of developing CHD. Thus patterns from the longitudinal monitoring of SBP uncover a novel aspect of assessing the risk for CHD.



LACK OF FUNCTIONAL BENEFIT FOLLOWING REVASCULARIZATION IN PERIPHERAL ARTERIAL OCCLUSIVE DISEASE PATIENTS WITH REST PAIN

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We determined whether peripheral arterial occlusive disease (PAOD) patients with rest pain experienced functional benefits following lower extremity revascularization. Twenty ambulatory patients (age = 68 ± 7 years) underwent infrainguinal revascularization to alleviate their rest pain. Peripheral hemodynamic and functional measures were obtained on each patient 1 week prior to, and 3 months following revascularization. Critical limb-threatening ischemia was alleviated by surgery, as the ankle/brachial index (ABI) increased 133% (p < 0.001) from 0.33 ± 0.06 to 0.77 ± 0.09. Despite the marked peripheral hemodynamic improvement following revascularization, little gains were noted in functional measures. The 6-minute walk distance only increased by 6% (p = 0.739) from 285 ± 29 meters to 301 ± 34 meters. Additionally, the free-living daily physical activity, measured by an accelerometer worn over a two-day period, increased by less then 1% (p = 0.996) from 214 ± 46 kcal/day to 215 ± 83 kcal/day. We conclude that improvements in the peripheral circulation of PAOD patients with rest pain following infrainguinal revascularization do not translate into improvements in ambulation or in free-living daily physical activity.

Supported by NIA (P60AG12583 and K01AG00657).

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A METHOD TO CHARACTERIZE BREATHING PATTERNS DURING SLEEP IN OLDER ADULTS.

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This study represents the first step in testing the hypothesis that breathing patterns during sleep are a marker of risk for cognitive decline in older adults. Five older adults (age 65-79 yrs) were monitored over 2 nights at a GCRC using an abdominal inductance band & standard polysomnography. Cognitive processing was assessed using a simple reaction time, a 4 choice reaction time, & the Symbol Digit Modalities Test. For each consecutive five minute interval (n=360), three variables were used to classify breathing patterns: the *standard deviation of interbreath intervals (sdIBI:* >3.0s identifies patterns with 3 or more apneas), *the standard deviation of interbreath periods (sdIBP:* ≥ 2.0 cycles per second [cps] indicate high periodicity) & the sdIBI/sdIBP ratio. Three patterns were identified. Type 1 had no apneas (sdIBI<1.5s) & low periodicity (sdIBP <2.0cps). Type 2 had apneas (sdIBI:2.5-3.5s), high periodicity (sdIBP:2.0-5.0cps) & sdIBI/sdIBP ratios

>1.0. Type 3 had more apneas (sdIBI 4.0-7.0 s), higher periodicity (sdIBP 4.0-5.0cps), but sdIBI/sdIBP ratios <1.0. The subject with the lowest processing scores had the most intervals with Type 3 pattern. The periodicity of breathing during sleep may be an important marker of risk for cognitive decline in older adults. Support: R00046, NR06821-01, NRO3962, & 1S15MH53651.

USE OF MULTIPLE RATER KAPPA TO DEVELOP A TAXONOMY OF PASSIVITY IN DEMENTIA

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C. Antonakos, Center for Nursing Research, University of Michigan, 400 N. Ingalls, Ann Arbor, MI 48109.

Measures of agreement are both necessary and useful to the conduct of clinical and applied research in dementia. The purpose of the present study was to utilize an innovative application of multiple rater Kappa to develop and revise a comprehensive taxonomy which categorized passive behaviors in dementia. The taxonomy was constructed inductively through the synthesis of 16 empirical studies which yielded six inductively derived nonhierachial groupings. Six nurse scientist expert raters independently completed two rounds of ratings. Multiple rater Kappa (Fleiss, 1971), was .42 (fair agreement) for the first round. Following taxonomy revisions, Kappa improved to .69 (substantial agreement) and showed statistically significant agreement among raters ($p < .001$). Extent of agreement for the six categories of the taxonomy ranged from .58 for the diminution of psychomotor activity category to .84 for the diminution of emotions categories.

LONG-TERM CARE FOR RESIDENTS WITH DEMENTIA: FINDINGS FROM A STUDY OF "THE EMPOWERED AIDE MODEL" (T.E.A.M.)

C.A. McAiney, M.J. Stones, K.S. Brown, O.W. Malott, Department of Health Studies and Gerontology, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1

"The Empowered Aide Model" (T.E.A.M.) was developed for long-term care staff who care for residents with dementia. The goal of the model is to improve the long-term care work environment by reducing job-related stress among health care aides (HCAs) and improving their perceptions of the work environment. These goals are achieved by way of the four components of T.E.A.M.: empowerment, organization, education, and teamwork. A study was conducted to examine the impact of the model on HCAs. T.E.A.M. was implemented in two long-term care facilities in Ontario, Canada; two other facilities served as controls. Data were collected at baseline and after 4, 8 and 12 months. Repeated measures ANOVA revealed that in comparison with HCAs in the control group, HCAs in the treatment group experienced significantly lower levels of burnout, work pressure and control, and significantly higher levels of autonomy, innovation and supervisor support over time. This paper will provide an overview of T.E.A.M., present detailed results from the study, and identify some of the issues which arose during the implementation of this model.

INCREASING MEMORY & SELF-EFFICACY IN NURSING HOME RESIDENTS

G. J. McDougall, M. Cerpa, S. Ide, M. Martin. Bolton School of Nursing, Case Western Reserve University, Cleveland, OH 44106.

This 8-session intervention was designed to increase memory self-efficacy and memory performance. Forty six percent of the participants scored in the depressed range on the CES-D scale. After being screened with the MMSE subjects (M=71 years of age) were randomly assigned to the experimental (n=31) and control (n=31) groups. At pretest, the experimental group had lower MMSE scores (21 vs. 23), lower memory self-efficacy (31.01 vs. 51.52), and lower memory change--decline/unstable (2.12 vs. 3.28) scores. Eight memory classes were provided to the experimental group. Forty two percent (n=13) of the individuals attended at least two classes, and only 1% (n=2) attended all eight. There were positive correlations ($p \leq .05$) between the number of memory classes attended and memory self-efficacy (.21), Rivermead Behavioral Memory Test screening score (.22), and standard profile score (.28). There were no differences in memory and/or self-efficacy scores at posttest. The affective and cognitive levels may have confounded the findings.

EFFECTS OF AN ABILITIES-FOCUSED PROGRAM OF MORNING CARE ON BEHAVIORS OF RESIDENTS AND CAREGIVERS' PERCEPTIONS OF CAREGIVING

D. Wells & P. Dawson, S. Sidani, D. Craig, & D. Pringle, Fac. of Nursing, U. of Toronto, 50 St. George St., Tor., Canada. M5S 3H4

Morning care is challenging for residents and caregivers. It is the time that agitated behaviors most frequently arise. Controlled studies are required concerning the benefits of systematically designed programs of care that may optimize residents' level of functioning and facilitate the caregiving process. The objectives of this study were to evaluate the effects of an abilities-focused program of morning care on residents' (a) participation in care, (b) social-interactive behaviors, (c) level of agitation, (d) frequency of aggressive episodes, and (d) overall level of function; and on caregivers' (a) social-interactive behaviors, (b) perceived ease of caregiving, and (c) level of stress. A quasi-experimental design with matched subjects was used to evaluate the effects of the program on 40 residents and 56 caregivers on 4 cognitive support units (1 experimental and 3 control). Data related to the outcomes were measured twice at baseline and at 3 and 6 months post intervention. Repeated measures ANOVA were used to examine changes in outcomes. Results indicated changes over time for residents: (a) attending (F=8.54, p=.000), frequency of agitation (F=6.01, p=.005), physical dependence (F=4.60, p=.008), social functioning (F=3.57, p=.023), and disengagement behaviors (F=4.23, p=.012). For caregivers, a group x time effect was found for attending (F=3.31, p=.023), calm/functional (F=7.18, p=.000), social (F=4.52, p=.005), and relevant behaviors (F=4.82, p=.003). Discussion will emphasize the evidence from these results for a changed context of care for the new millennium.

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PATIENT PERCEPTION THAT GOALS OF MEDICAL ARE INCONSISTENT WITH PREFERENCE IMPACT ON RESOURCE UTILIZATION J.M Teno, E. Fisher, MB Hammel, K. Coppola, N. Dawson, J Lynn. Center for Gerontology and Health Care Research, Brown University, Providence, RI 02912

Objective: To evaluate whether health care costs were higher when the patient perceived that their medical care was inconsistent with their preferences either for medical treatment to focus on life extension or on their comfort, even if it shortened their life.

Participants: 1165 seriously ill patients (mean age 71.5, 59% female) with preference for a treatment approach that focused either on extending life (40%) or the patients comfort, even if it shortened their life (60%).

Methods: Patients (or surrogate decision makers) were asked about patients' preferred approach to care and whether treatment was viewed as consistent with that preference. One year resource utilization was based on cost to charge adjusted Part A Medicare Charges and Part B resource values units. To adjust for disease severity, age, gender race, patient's functional status, income, and years of education, we performed multivariate linear regression model with a log transformed dependent variable.

Results: When the patient preferred an aggressive approach to care, the majority (86%) patients (or surrogates) believe that care was consistent. When the patient preferred that medical care focus on their comfort, treatment goals were often in discord (35%) or unclear (24%). Among patients who preferred a palliative approach to care, resource utilization was significantly increased when the patient believe that medical care was contrary to preferences for a palliative approach ($71,967) compared to $42,245 when the patient believed medical care was consistent with patient preference. Even after adjustment, the ratio of predicted resource utilization was 1.4 times higher (95%CI 1.2-1.6).

Conclusion: In seriously ill patients, patient perception that medical care is not consistent with a preferred treatment approach that focuses on their comfort and not life extension is associated with increased one year resource utilization. Efforts to tailor medical treatment to patient's care preferences may both improve patient satisfaction and reduce health care costs.

AGING AND END OF LIFE CARE FOR HOSPITALIZED CANCER PATIENTS. J. H. Rose, E. O'Toole, N. V. Dawson, C. Thomas, A. Connors, N. Wenger, H. Cohen, M. B. Hamel, J. Lynn, for SUPPORT Investigators. Dept. of Medicine, Case Western Reserve University, Cleveland, OH 44120

Age differences in treatments (tmts) to rescue and/or to extend life and documented discussions with patients/families about aggressiveness of care were examined. Record reviews were conducted for 3 age groups: older (OA: ≥65, n = 618, $\bar{X}$=72, sd=5), middle aged (MA: 45-64, n=647, $\bar{X}$=57, sd=6), and young adult (YA: 18-44, n=159, $\bar{X}$=38, sd=6) end stage cancer patients (pts) in SUPPORT (SUPPORT Investigators, 1995). At study entry, the estimate of 6-month survival for pts was 50%. Exploratory 2-factor analysis of tmt interventions on hospital day 3 revealed a 6 item cluster as a scale of rescue tmts (e.g., transfusions) and 4 items scaled as tmts to extend life (e.g., chemotherapy). Nine discussion topics (e.g., resuscitation) formed a scale of in-hospital communication with pts/families about aggressiveness of care. ANCOVA was conducted comparing the 3 age groups on treatment and discussion scales; covariates were cancer type, APACHE score, and SUPPORT prognostic model for 2 month survival.

	OA	MA	YA
Tmts to Rescue ($\bar{X}$, se)	1.54 (.04)	1.76 (.04)	1.86 (.07)
Tmts to Extend ($\bar{X}$, se)	.99 (.04)	1.14 (.03)	1.15 (.07)
Discussions ($\bar{X}$, se)	1.26 (.05)	.96 (.05)	.89 (.10)

Older adults received fewer treatments to rescue (p<.0001) or to extend life (p<.05) than other age groups. By contrast, more discussions about aggressiveness of care (p<.0001) were documented with older pts/families. Findings suggest an age difference in care practices, with greater attention to treatment limitation for older patients, who, in this study, were young old.

TREATMENT GOALS OF ACUTELY ILL OLDER PERSONS. TR Fried, C van Doorn, ME Tinetti, VA Connecticut Healthcare System and Yale University School of Medicine, New Haven, CT.

It is commonly assumed that for many older persons, "cure" is less important than "care," or that survival is not the most highly desired outcome of acute illness treatment. The purpose of our study was to test the validity of this assumption.

Telephone interviews were conducted with community-dwelling persons age ≥65 years hospitalized with an episode of congestive heart failure, chronic obstructive lung disease, or pneumonia two months after discharge. Included was a question asking respondents if their desired goal of care was to maximize survival, to maximize comfort, or to balance the two.

The first 122 respondents have a mean age of 75.3 ± 6.5 years, are 55% female, and 9% non-white. Seventy-six percent preferred to maximize survival, 15% preferred to maximize comfort, and 9% preferred a balance. A preference for maximizing comfort or for a balance was associated in bivariate analysis at p<.05 with female gender (37% of women vs. 16% of men), education (45% of those with less than high school vs. 19% of others), self-rated health (32% of those rating health as good/fair/poor vs. 5% of those with higher ratings), functional status (50% of those dependent in ≥ 3 ADLs vs. 38% of those dependent in 1-2 ADLs vs. 23% of those independent), and religiosity (52% of those who were deeply religious vs. 21% of others). Age, race, depression, social support, diagnosis, and comorbidities were not associated with preference.

Although the majority of older persons with acute illness wish to receive treatment to maximize their survival regardless of the discomfort, nearly one-fourth wish comfort to be a consideration. An even higher proportion of women, patients with ADL limitations and poor self-rated health, and deeply religious patients have comfort as at least part of their goals for care.

CHARACTERISTICS OF INDIVIDUALS WHO VALUE QUALITY OVER LENGTH OF LIFE JM Thompson, LC Burton, and SM Friedman Baylor Health Care System, 4004 Worth Street, Dallas, Texas 75246 and Johns Hopkins University, Baltimore, Maryland

It is generally believed that older individuals are more concerned about preserving quality than length of life. However, it is unclear whether this is the case, and if so, which individuals are more likely to choose quality over length of life 114 individuals aged 65 and over (mean age 80.4, 82.4% female, and 68.4% white) who were within three months of enrolling in some type of long term care service were interviewed to determine their functional status, health care utilization, and health care preferences. Caregivers served as proxies for individuals with Mini-Mental Status Examinantion (MMSE) scores less than 18. Participants were also asked to choose whether they would "want to live as long as possible, regardless of the quality of life I experience" or "want to preserve a good quality of life, even if this means that I may not live as long". 72% of participants chose quality of life over length of life. Age greater than 85 was significantly associated with choosing quality of life over length (p>.03). Sex, marital status, race, level of education, MMSE score, dependency in activities of daily living, dependency in independent activities of daily living, and self perceived health status were not associated with preference for qualtiy versus length of life. In summary, the majority of older individuals do value quality over length of life with the highest prevalence in those older than 85. However, without predictable markers to characterize those individuals , discussions with each patient with respect to these important issues is essential.

CHANGES IN CPR PREFERENCES AMONG NURSING HOME RESIDENTS **E Siegert, L O'Brien**, **J A Grisso, G Maislin, K LaPann, K Krotki, L Evans UMDNJ-RWJ Medical School at Camden, University of Pennsylvania Schools of Medicine and Nursing, Temple University**

Many have voiced concerns about the usefulness of advance directives in planning end-of-life care, particularly whether patient treatment preferences change over time. The purpose of this study was to determine whether nursing home resident preferences for CPR change over time and determine whether there are individual and/or institutional factors associated with changes in preferences. A one year follow-up in person survey was conducted in forty-one nursing homes and included one hundred and eighty nine decisionally capable nursing home residents. The main outcome measures changes in CPR preferences and the individual factors associated with changes. One year follow-up data was collected on 189 of the original 421 randomly selected residents who participated in our comprehensive survey of preferences for life-sustaining treatments. Of the 112 residents who preferred CPR at baseline, 16.3% changed to refuse CPR at the one year follow up interview. Of the 77 residents who refused CPR at baseline, 17.1% changed to choose CPR one year later. An increased likelihood of changing from preferring to not preferring CPR was associated with a > 12th grade education, residing two yrs or less in the facility, and having a serious illness within in the past year. There were no statistically significant factors which were associated with changing from not preferring CPR to preferring CPR at the time of follow-up. In summary, the majority of study participants re-interviewed one year later evidenced stable preferences regarding CPR. Those that changed preferences were equally likely to change in either direction. Preferences for CPR should be reassessed on a scheduled basis. CM-7

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CHALLENGES TO AND STRATEGIES TOWARD INSURING NUTRITIONAL ADEQUACY AMONG RURAL ELDERS

N.E. Schoenberg, Dept of Behavioral Science & Sanders-Brown Center on Aging, University of Kentucky, College of Medicine Office Building, Lexington, KY 40536-0086.

Participants:

R.T. Coward (School of Health & Human Services, University of New Hampshire, Durham, NH 03824-3563) L. Mullens, R.A. Mullens, C.E. Coward, A.S. Coward Factors Perceived by Rural Older Adults to Inhibit Nutritional Intake.

J.McDonald, S.A. Quandt (Dept. of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157) T.A. Arcury (Center for Urban & Regional Studies, University of North Carolina, Chapel Hill, NC 27599) R.A. Bell, M.Z. Vitolins, (Dept. of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157) On Their Own: Nutritional Self-Management Strategies of Rural Widowers.

S.A. Quandt, J. McDonald, R.A. Bell (Dept. of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157) T.A. Arcury (University of North Carolina) M.Z. Vitolins (Wake Forest University School of Medicine) Nutritional Self-Management Strategies of Elderly Widows in Rural Communities.

N.E. Schoenberg (Dept. of Behavioral Science & Sanders-Brown Center on Aging, University of Kentucky, College of Medicine Office Building, Lexington, KY 40536-0086)

The Divergent Meanings of Food between Rural Elders and Health Care Providers.

Discussant:

B.J. McCulloch (Dept. of Family Studies & Sanders-Brown Center on Aging, 302 Funkhouser Bldg, Lexington, KY 40506-0054)

Research documents the nutritional vulnerability of older adults living in rural areas. These four papers address the challenges and barriers to sustaining a healthy diet, such as widowhood, inadequate use of social support or formal service use, poor health, poverty and food conceptualizations and terminology that differ from biomedical nutritional knowledge. In addition, this symposium explores the strategies and resources used by rural elders to meet their nutritional needs, including life course experiences, use of informal support and formal services, and other creative self-management strategies. Each contributor will discuss implications of the research findings for addressing the nutritional vulnerability of rural elders.

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THE CHALLENGES AND REWARDS OF CONDUCTING PHYSICIAN-OLDER PATIENT COMMUNICATION RESEARCH

Co-Chairs:

S.A. Fox, RAND, 1700 Main Street, Santa Monica, CA 90407-2138 and Department of Medicine, University of California, Los Angeles, CA 90024 and M. Ory, National Institute on Aging.

Participants:

M. Greene (Department of Health and Nutrition Sciences, Brooklyn College, NY 11210), R. Adelman

(Division of Geriatrics and Gerontology, New York Hospital, Cornell Medical Center, NY 10021) Conducting a Longitudinal Study of the Physician-Older Patient Relationship: Research Problems and Solutions.

S.E. Connor (RAND, Santa Monica, CA 90407-2138), S.A. Fox, S. Asch (RAND and Department of Medicine, University of California, Los Angeles, CA), E. Hamilton, N. Duan, (RAND, Santa Monica, CA) Human Subjects and Recruitment Challenges in a Physician-Older Patient Communication Study.

N. Duan (RAND, Santa Monica, CA), S.A. Fox, S.P. Reise (RAND and Departments of Medicine and Psychology, University of California, Los Angeles, CA) Challenges in Statistical Design of Physician-Patient Communication Studies.

S.A. Fox (RAND, Santa Monica, CA and Department of Medicine, University of California, Los Angeles, CA), S.P. Reise (RAND, Santa Monica, CA and Department of Psychology, University of California, Los Angeles, CA), N. Duan, S.E. Connor (RAND, Santa Monica, CA) A Model of Physician-Older Patient Communication.

Discussant:

M. Ory (National Institute on Aging)

Communication between physicians and patients plays a significant role in patients' health outcomes. In recent years, researchers have paid increased attention to the determinants, outcomes and nature of physician-older patient communication. This symposium brings together new and established researchers from multi-disciplinary perspectives to report on the challenges and rewards of this research area. Participants will present: the need to conduct longitudinal physician-patient studies in spite of inevitable problems; the challenges of recruiting physicians from a managed care era into a research project as well as the need to anticipate human study protection committee concerns; statistical design issues and challenges; and, finally, a model of effective communication to increase adherence to cancer screening will be presented.

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RACE AND SOCIOECONOMIC STATUS: IMPLICATIONS FOR DISABILITY AND TREATMENT AMONG DISABLED OLDER WOMEN: THE WOMEN'S HEALTH AND AGING STUDY.

E.M. Simonsick, National Institute on Aging, 7201 Wisconsin Ave., Suite 3C-309, Bethesda, MD 20896.

Participants:

J.D. Kasper (Dept. Health Policy and Mgmt., JHU School of Public Health, Balt. MD 21205) Race and Socioeconomic Status in Disabled Older Women: Associations with Disease and Disability.

E.M. Simonsick (NIA, Bethesda MD 20896) Association of Race, Education, and Income Adequacy with Self-Reported Difficulty with and Poor Performance of Complex Tasks in Disabled Older Women.

A. Lyles (Dept. Health Policy and Mgmt., JHU School of Public Health, Balt. MD 21205) Untreated Depression in Disabled Older Women: The Role of Insurance, Race, and SES.

K.D. Frick (Dept. Health Policy and Mgmt., JHU School of Public Health, Balt. MD 21205) Flu Shots Among Older Women with Functional Limitations: Association with Race and Income.

Discussants:

S. White-Means (Dept. of Economics, University of Memphis, Memphis TN).

T. Seeman (Dept. Medicine, University of California, Los Angeles, Los Angeles CA 90095).

Both socioeconomic status and race have strong associations with health, functioning, and health care utilization and are themselves highly correlated. In order to better understand the disabling process and identify key etiological factors and effect modifiers, it is important to disentangle the effects of race and SES. When race is treated solely as a proxy for SES, as is often done, other social, psychological and biological influences associated with race are overlooked. In addition, since controlling for SES often does not eliminate the association between race and health, functioning, and utilization, understanding what underlies the effects of race is critical. Data are from the Women's Health and Aging Study, an age-stratified community dwelling population-based sample of 1,002 disabled older women in Baltimore, MD, with racial and socioeconomic diversity. 28% are African American, 37% have incomes below poverty, and 40% have 8 years of education or less. This symposium addresses the role of SES and race in disability and physical function (papers by Kasper and Simonsick) and treatment (papers by Lyles and Frick) among physically disabled elderly women.

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RELIGION AND SPIRITUALITY AT THE END OF LIFE: STUDIES OF COURSE AND OUTCOMES

J.C.Hays, Dept. of Psychiatry, Center for the Study of Aging and Human Development, and Center on Religion/Spirituality and Health, Duke University Medical Center, Durham, NC. 27710

Participants:

E.L.Idler, S.V.Kasl (Institute for Health, Health Care Policy and Aging Research, Rutgers, University, New Brunswick, NJ 08903[a]) Patterns of Religiousness and Spirituality in the Last Year of Life.

J.A.Thorson (Dept. of Gerontology, University of Nebraska/Omaha, 68182) Religiosity, Death Anxiety, and Depression.

H.G.Prigerson, S.V.Kasl (Yale School of Medicine, 144 CMHC, New Haven, CT 06519[a]) The Effect of Religiosity on Survival: Can It Survive the Effect of Social Integration?

A.Futterman, L.W.Thompson, D. Gallagher-Thompson (College of the Holy Cross, Worcester, MA[a]) Factorial Validity of the Texas Inventory of Grief-Revised in an Older Bereaved Sample.

Discussant:

M.S. Moss (Polisher Research Institute, Philadelphia Geriatric Center, 5301 Old York Rd., Philadelphia, PA 19141)

[a] Address for first author.

The Consensus Report on Scientific Research on Spirituality and Health (NIHR/Templeton Foundation) has placed a high priority on the study of religion and spirituality among patients with terminal conditions and on use of the most rigorous study designs available. The purpose of this symposium is to describe the natural history of religiousness at the end of life; to distinguish between the effects of religion's several ingredients on death anxiety, mortality, and grief; and to specify age and health status differences in these effects.

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SOCIAL RELATIONS AS PREDICTORS OF LONGEVITY: FIVE LONGITUDINAL STUDIES

D. Field, University of California at Berkeley.

Participants:

A.Walter-Ginzburg, T.Blumstein, A.Chetrit, J.Gindin, & B.Modan (Institute of Clinical Epidemiology, Chaim Shebaz Medical Center, Tel HaShomer, Israel) The Influence of Social Relationships on Mortality of the Old-Old in Israel.

C.L.Johnson (Medical Anthropology, University of California, 1350 7th Avenue, San Francisco, CA 94143) Social Predictors of Survivorship Among the Oldest Old.

M.Jylhä (School of Public Health, University of Tampere, POBox 607, FIN-33101, Tampere, Finland) Social Relationships and Social Activity as Predictors of Survival.

I.Fooken (University of Siegen, Psychologie, Adolf-Reichwein-Strasse C3107, 57068 Siegen, Germany) & Chr.Rott (University of Heidelberg, Germany) Advanced Longevity: Converging Patterns for Men and Women?

D.Field & L.McCarter (Institute of Personality and Social Research, 4143 Tolman Hall, Berkeley, California 94720) Friendships as Predictors of Survival in Advanced Old Age.

Discussant:

M.Silverstein (Andrus Gerontology Center, University of Southern California, Los Angeles, California, 90089).

Five longitudinal studies from four countries illuminate the changing contexts of aging. In part because increasing life expectancy and in part because of changing societal norms, old persons are no longer expected to be isolated and lonely in their final years. Instead, research finds continuing activity both within and beyond the family.

Each of the five studies found that being embedded in social networks predicts survival during and beyond young-old age. By old-old age, however, some of these associations have diminished, and some predictors are gender-specific. Among the oldest-old, many experience some degree of social disintegration.

These papers provide an impressive convergence of evidence from Finland, Germany, Israel, and the United States on the role of social relationships in promoting longevity. Will the trends observed here obtained in other cultures, as well? Perhaps this group of studies will stimulate new studies from non-Western cultures.

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PENSIONS AND SAVINGS: PROMISES, PROBLEMS, AND IMPLICATIONS FOR SOCIAL SECURITY REFORM

E.A. Bruce, Y-P Chen, Gerontology Institute, Univ. of Mass. Boston, 100 Morrissey Blvd. Boston, MA 02125.

Participants:

E.A. Bruce, (Gerontology Institute, Univ. of Mass. Boston, Boston, MA 02125) Private Pensions: Strengths, Gaps and Prospects for the Future.

P.J. Yakoboski, K.A. Olsen, (Employee Benefit Research Institute, Washington, DC 20037) Findings from the 1998 Retirement Confidence Survey.

M.C. Hounsell, (Women's Institute for Secure Retirement, Washington, DC 20004) J. Lewis, Heinz Family Foundation, Washington, DC 20004) Savings and Investing for Retirement: Views & Patterns of 25-55 years old.

Discussants:

Y-P Chen

The retirement income system in the United States has frequently been described as a three-legged stool, comprising Social Security, employer pensions, and individual savings. The system works well for people when all these legs are strong. Unfortunately, for many, especially among racial minorities and women, the pensions and/or savings legs are weak. Although there is a recent trend toward greater pension receipt rates for women and minority retirees, recent developments do not bode well for the future of pensions as a source of retirement income for many. As we discuss Social Security reform, it is critical that we have a better understanding of the promise and problems of pensions and savings.

This symposium consists of 3 papers, one on the effectiveness of the private pension system and the other two on retirement savings surveys (the 1998 Retirement Confidence Survey of 1,000 Americans both working and retired and a Heinz Family Foundation survey of 1,000 women and 500 men aged 25-55.) Both surveys explored the extent to which people are saving, the risks, the barriers and the prospect for minorities and women. In addition, the Retirement Confidence Survey in 1998 included a special survey of small businesses to explore the reasons why small employers do or do not offer a retirement plan and the type of plans they offer. The examination of current trends in the private pension system will include what security it can be expected to provide, to whom, and what gaps exist. Issues of coverage rates, portability, investment security and adequacy will be discussed. Given what we know are the strengths and weaknesses of pensions and savings in this country, the participants and the discussant will explore the implications of the trends and prospects of pensions and savings for Social Security reform.

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THE IMPACT OF FAMILY CHANGE ON FAMILY TRANSFERS

Peace,S.M., Bornat,J., Dimmock,D., & Jones,D
School of Health & Social Welfare, The Open University, Walton Hall, Milton Keynes, MK7 6AA, Great Britain.

The impact of family change through divorce, separation and remarriage on the lives of older people is a relatively new area of study within British Gerontology. In this paper the authors report on findings from a small scale qualitative study based on life history interviews with 72 people who had experience of family reconstitution living within the town of Luton in South East England. The study was one of 17 projects funded by the Economic and Social Research Council in a recent programme on Household and Population Change in Britain.

Data is presented concerning the impact of family change on transfers between the generations in terms of both money and services. The research showed that the principle of 'blood being thicker than water' continues to be strong in financial transactions such as inheritance, whilst this position may be weakened in matters of care and emotional support where other factors such as proximity, duration of relationship and gender are of enduring importance.

BSS 6

Household Composition and Labor Force Participation among Unmarried Women. Jody A. Wilkinson and Janet M. Wilmoth, Department of Sociology and Anthropology, Purdue University, 1365 Stone Hall, West Lafayette, IN 47907.

Using data from the 1992 Health and Retirement Study, this analysis examines the effect of household composition on the labor force participation of unmarried women. Two aspects of household composition are studied: household size and generation type. Generation type is classified by the number of generations, "up" and/or "down" in the unmarried woman's household. Descriptive statistics are used to discuss the distribution of labor force participation across different household types. The bivariate statistics indicate that women who have individuals within the same and younger generations in the household are more likely to be out of the labor force. Logistic regression models are estimated that predict the likelihood of being out of the labor force. The results indicate that the majority of differences in labor force participation across household composition groups can be attributed to differences in demographic, employment, health, and wealth characteristics.

INTERGENERATIONAL EXCHANGE BETWEEN NEAR-ELDERLY FATHERS AND ADULT CHILDREN. C. Stelle & N.W. Sheehan, School of Family Studies, Univ. of Connecticut, Storrs, CT 06269.

The gerontological and family research literature has reported that near-elderly parents have generally satisfying relationships with their adult children. Much of that literature has focused on mothers' relationships with adult children. The purpose of this study is to investigate the patterns of intergenerational exchange between fathers and their adult children and the effects of this exchange on fathers' well being. Employing data from the second wave of the National Survey of Families and Households, the research focused on a subset of older fathers. The sample consists of fathers between 50-60 years of age with at least one child over the age of 18. The types of support investigated were the provision and reception of transportation, household work, and emotional support. The focus of the analysis was the influence of each type of support on the overall life satisfaction. Results indicate that the 24.7% of near-elderly fathers provided no support and 49.7% received no support. Fathers who provide advice, encouragement, and emotional support report higher levels of overall life satisfaction (F=3.919, p=.048). Fathers also report higher levels of life satisfaction when receiving household assistance (F=5.306, p=.022). Employing an index of total support (none, low, medium, high provision), fathers' provision of assistance was related to their overall life satisfaction (F=2.28, p=.079). Comparing the relationship between low providers and high providers, fathers who provide high support report better overall life satisfaction (M=6.54) than those providing no assistance (M=5.89) (N=178, F=5.946, p=.016). These findings contradict the general perception of older fathers as emotionally detached and satisfied with low exchanges of support with their adult children.

INTERGENERATONAL EXCHANGES IN BEIJING, CHINA: PATTERNS IN 1991 AND IMPLICATIONS FOR THE COMING CENTURY

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Confucian ideals promote co-residence with the husband's parents and dictate that upon marriage the wife's obligations transfer from her relatives to her husband's relatives. Declines in fertility in China will leave many elderly without a surviving son. There is concern that elderly with no surviving sons will not receive emotional or financial support from younger relatives.

Using data from a survey of 2,000 working-age couples in Beijing, China in 1991, co-residence, visiting, and financial exchanges with each spouse's parents are examined. Co-residence with husband's parents is more common than with wife's parents, but visiting and giving monetary support are very common and as likely for the wife's parents as the husband's parents. To the extent that working-age couples help the wife's parents as well as the husband's parents, concerns about the future welfare of the elderly in urban China may not be justified.

THE CONTRIBUTIONS OF ELDERLY HOUSEHOLD MEMBERS TO REDUCING ECONOMIC DISTRESS AMONG CHILDREN

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Children and the elderly draw on different pools of public resources, fueling recent discussions focusing on intergenerational tensions surrounding the appropriate share due each age group. Yet within family households, the "fortunes" of children may be closely tied to that of their elderly relatives. While a sizable

literature documents the considerable kinship support systems that link the generations, the implications of these systems for poverty and for program participation have not been extensively considered. Given the trends and debates surrounding public support for these two broad age groups, such a consideration is of considerable policy importance.

This study is based on data from the 1990 panel of the Survey of Income and Program Participation (SIPP) Results suggest that children who live in households including at least one individual aged 65 and over are less likely to be poor than their counterparts who have no elderly co-residents. Moreover, living in households including the elderly provides for some children access to more sources of needs-based transfers as well as more stable economic environments. The implications of these results for policy are considered.

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(See Session 4)

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HOME HEALTH: A SERVICE FOR ALL USERS?

B. Gage, The Urban Institute, 2100 M St., NW, Washington, DC 20037

Participants:

B.Gage&M.Moon (The Urban Institute)
S.Hughes, F.Weaver, M.Gheorghiade, R.Wixson, R.Williams, P.Edelman, L.Manheim, D.Dunlop, R.Singer, & L.Martinez (University of Chicago)
P.Doty&MEJackson(ASPE/MEDSTAT)
E. Walsh (CHER, Cambridge,Ma)
Discussant: H.Komisar (Georgetown University)

The Balanced Budget Act of 1997 modified Medicare's payment policies for home health services. These changes follow a great deal of discussion concerning the role of the home health benefit -- is it a post-acute or long-term care benefit? This symposium summarizes the benefit changes and presents studies of how the Medicare benefit is used by different populations, the importance of this benefit to the functionally-impaired community; and the implications of reducing the functionally-impaired populations' access to these services. These papers present original data analyses addressing these issues.

Gage uses 1995 Medicare claims to discuss the impact of recent changes in Medicare's home health benefit. Hughes presents results from a clinical trial of Medicare home health users analyzing the impact of condition specific protocol for CHF and TJR patients. Doty focuses on the functionally-impaired Medicare population's use of home health. Walsh discusses the adequacy of in-home assistance to functionally- impaired Medicare beneficiaries as a predictor of acute care use. Komisar discusses these papers as they relate to her recent publication on this issue. SRPP (10)

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ASSESSING ENVIRONMENTAL MEANING AND IMPACT

G. Weisman, Institute on Aging and Environment, University of Wisconsin, Milwaukee, WI 53201.

Participants:

C. Norris-Baker, (Dept. of Architecture and Center for Aging) and R. J. Scheidt, (School of Family Studies and Human Services, Kansas State University, Manhattan, KS 66502) Place Meanings, Cultural Meanings, and Deculturation Among Older Adults Living in Rural Communities

K. Day, (Department of Urban and Regional Planning, University of California, Irvine, CA 92697) U. Cohen, (Institute on Aging and Environment, University of Wisconsin-Milwaukee, Milwaukee, WI 53201) Integrating Cultural Heritage in Environments for People with Dementia: Conceptual Framework and Case Studies

R. Meehan, S. Briller, and M. Calkins, (I.D.E.A.S, Inc., 8055 Chardon Rd., Kirtland, OH 44094) Therapeutic Goals for People with Dementia: an Empirical Methodology

B. Schwarz, R. Brent, and A. Darnell, (University of Missouri, Columbia, MO 65211) Subject Impact of Environmental Attributes on Tenants in Assisted Living

Discussant:

U. Cohen (Institute on Aging and Environment, University of Wisconsin-Milwaukee, Milwaukee, WI 53201)

Gerontologists, care providers and design professionals are increasingly interested in the potential of residents' place-related experiences and culture-specific phenomena to serve as catalysts for productive interventions. The four presentations address several dimensions of significance to individuals and groups in the context of the community, or in assisted living and long-term care: place and self identities of residents, the unique meaning of cultural heritage in small homogenous groups, and impact of environmental attributes on individuals in care settings.

Commonly employed therapeutic goals are questioned, and their relationships to place-related and culture-based attributes are discussed.

The presenters propose various strategies for operationalization of concepts with a potential contribution to higher level of residents' interaction, control, positive self image, and improved quality of life.

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THE INTERDISCIPLINARY TEAM VIEWED THROUGH DISCIPLINE-SPECIFIC LENSES.

J. L. Howe and C. K. Cassel, Department of Geriatrics, 1 Gustave Levy Pl., Mount Sinai Medical Center, New York, N.Y. 10029

Participants:

R. Liepzig (Department of Geriatrics, Mount Sinai Medical Center) The Physician's Perspective

M. J. Mellor (Department of Geriatrics, Mount Sinai Medical Center) The Social Worker's Perspective

M. Vezina (Department of Nursing, Mount Sinai Medical Center) The Nurse Practitioner's Perspective

F. Sherman (Senior Services, Mount Sinai Health System) and R. A. Tsukuda (Portland VAMC, Portland, OR 97207) Transforming Roles and Relationships in a New Health Care Environment

Discussants:

T. Fulmer (Division of Nursing, New York University, New York, N.Y. 10012)

B. M. Sprouse (AARP Andrus Foundation, Washington, DC 20049)

Interdisciplinary teamwork, although essential to geriatrics care, has not been a clear focus of quality improvement in health care. The John A. Hartford Foundation sponsors a national initiative, the Geriatrics Interdisciplinary Team Training (GITT) Program, to prepare future health professionals to work on teams. Faculty of The Mount Sinai GITT Partnership find that the role of each discipline on the team needs to be made explicit to both future and current team members, and that efforts must be made to overcome stereotypes and preconceived notions about other disciplines before true teamwork can commence. Participants will address the multiple roles of each discipline on the team, how the discipline relates to the other disciplines, stereotypes and myths about each discipline, and ways to overcome these differences to create a functioning team. As new patterns of health care continue to emerge, understanding and strengthening interdisciplinary teams will be an important component of quality of care. Opportunities for team building through managed care incentives will be discussed.

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THE IMPACT OF RACE ON DECISIONMAKING SATISFACTION AND CAREGIVER DEPRESSION: A PATH ANALYTIC MODEL

Gary T. **Deimling**, Case-Western Reserve U., Cleveland, OH 44106, Virginia L. **Smerglia**, U. of Akron, Akron, OH 44325 & Michael **Schaefer**, Case-Western Reserve U.

Caregiving is a complex entity that includes family structure, environment, and the decisionmaking process. This research examines the impact of these factors on decisionmaking satisfaction and caregiver depression within the context of cultural differences represented by race. A causal model of caregiver depression is tested for 244 African American and white caregivers using data from an NIMH funded study. The model views race along with the caregiving context (spouse or adult child caregiver, care recipient ADL, and cognitive impairment) and aspects of family environment (adaptability, cohesion and conflict) as predictors of decisionmaking satisfaction. Decisionmaking satisfaction in turn is viewed as an important predictor of one global indicator of caregiver well-being, depression. Path coefficients obtained suggest very similar models for both racial groups. However, for African American caregivers family adaptability was the single strongest predictor of decisionmaking satisfaction. Family conflict was a significant predictor for whites. While decisionmaking satisfaction was a significant predictor of caregiver depression for white caregivers, it was not significant for Blacks. The data suggest those counseling family caregivers may need to focus on different aspects family environment, depending on the racial characteristics of the family.

PREDICTING PERCEIVED POSITIVENESS OF AN ELDER CAREGIVING RELATIONSHIP FROM THE PERSPECTIVES OF BOTH FILIAL PRIMARY CAREGIVER AND CARE RECIPIENT

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Caregiving models in the past have been limited by mainly focusing on the attitudes/perceptions of the primary caregiver. This study investigated how the caregiving process can be a positive, growth-related experience for both family members and possible individual-difference factors underlying these positive perceptions. Assessing the attitudes/perceptions of both primary caregivers (daughters) and care recipients (mothers, fathers), three caregiving process/outcome dimensions were examined: (1) perceived family role changes/adjustments (e.g., role constraints); (2) perceived role relations (e.g., feelings of mutual role understanding); and (3) self-perceived personal growth, understanding, and acceptance of changes associated with aging (self, other). Qualitative and quantitative analyses of the data (n = 108 pairs of caregivers/care recipients) revealed that the following factors, among others, determined a "positive" caregiving relationship: (1) mutual role agreement; (2) opportunities to express role needs; and (3) responsiveness to other. This research supported by a post-doctoral traineeship grant from NIA# T32 AG00220

COPING STRATEGIES, PEREPTIONS OF CAREGIVING, AND BLOOD PRESSURE RESPONSES IN BLACK FEMALE CAREGIVERS H. S. Lee, L. J. Holland, S. Picot, Case Western Reserve University, Cleveland, Ohio, 441106

The purpose of the present study was to examine the association of caregiving demands and coping strategies to his/her perception of caregiving and blood pressure responses. Caregiving demands were caregiver (CG)'s age, duration of caregiving, CG's employment status, income, and CG's reaction to the care recipient (CR)'s behavioral problems. CG's perceived cost and reward were observed for CG's perception of caregiving. Ambulatory Blood Pressure Monitor was used to measure 24 hours blood pressure. Data were obtained through face to face interviews with a random sample of seventy-seven black female CGs residing in Cleveland, Ohio. The mean age of the respondents was fifty-five years and median income was $15,000-19,999 per year. 39% of respondents had some college education. Texas Research Institute of Mental Sciences Behavioral Problem Checklist was used to measured CG's reaction to the CR's behavioral problems. Three coping strategies (confrontive, emotional, and palliative) were measured using the Jaloweic Coping Scale, Cost of Care Index, and Picot Caregiver Rewards Scale were used for cost and reward, respectively. Results of multiple regression analysis indicate that CG's age, employment status, duration of caregivng, and reaction to the self-care deficit explained the variance in emotional coping. CGs who are younger, non-employed, provide care to the older adults for a longer period of time, and bothered by self care deficit of the older adults more frequently used emotional coping. CGs who were more upset on the acting out behavior of the older adults reported higher caregiving cost. None of the caregiving demands and coping strategies explained perceived reward and CG's 24 hours blood pressure response.

Factors predicting changes in the psychological well being of informal caregivers of people with dementia

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The purpose of this paper is to describe the levels of psychological distress in informal supporters of people with dementia at baseline, 1-year follow-up and 2-year follow-up using the General Health Questionnaire (GHQ-30), and to investigate which factors predict psychological well being at each time point and a deterioration in well being over time. Data are reported from a 2-year longitudinal panel survey of informal supporters of older people with mental or physical frailty screened from a stratified random sample of people aged 65 or overin 4 centres in England. Data show that deterioration in caregivers' GHQ scores by 2-year follow-up was significantly related to: respondent's ADL score at 2-year follow-up, whether elderly subject had other informal caregivers, respondents' self-rated health at 2-year follow up, whether respondent felt own health affected by caring at baseline, whether respondents' ADL score had deteriorated at 2-year follow up. Predictors of a deterioration in personal well being at 2-year follow up were: respondent felt that relationship with subject had deteriorated over last 12 months and respondent felt depressed at baseline because of caring.

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Older Family Caregivers of People Affected by HIV
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One-half of adult persons who are ill with AIDS in the U.S. depend upon older relatives for financial, physical, medical, or emotional support, which represents a range of 50,000 to 100,000 adult Americans with AIDS in the homes of elder caregivers. There is a growing population of "AIDS orphans", or children whose caregiving parent has died from HIV who are most often cared for by grandparents through standby adoption or guardianship. Two descriptive studies of populations of older adults providing HIV related care were completed: a sample of 20 minority elders providing HIV related care in Chicago and a sample of 20 older adults providing relative foster care to HIV affected grandchilren connected to the state child welfare association. Qualitative interviews explored the caregiving situations, reasons for caregiving, coping methods and service utilization. Older adults provide primary care for their grandchildren affected by HIV for both the same reasons as other grandparent caregivers, as well as some unique aspects of HIV care. Many report they provide this care simply because it is needed, or due to family roles and expectations. Others describe how this care enhances their own quality of life or sense of meaning. Themes that emerge from these studies include non-disclosure of HIV care to potential social supports, perceived misunderstanding and discrimination due to the HIV care situation, internalized stigma and isolation, as well as a high degree of relationship satisfaction and personal sense of achievement due to this care.

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Evaluation of the Managed Community Care Program
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Capitated HCBS may enable providers to tailor client care plans while constraining costs of care. However, capitation may also encourage providers to institutionalize heavy care enrollees prematurely. The Managed Community Care Program (MCCP) in Chicago was initiated by the Illinois Department on Aging (IDOA) and the Council for Jewish Elderly (CJE) to provide more flexible care than that currently available through the Illinois FFS Community Care Program (CCP). All CCP clients who were active at CJE on 7/1/95 were converted to MCCP as well as all new clients referred to CJE between 7/2/95 and 6/30/98. IDoA continues to assess eligibility for care but CJE care managers design, monitor and revise care plans as needed. We are using a quasi-experimental design to compare costs and outcomes for MCCP clients to those experienced by a matched comparison group of CCP clients. Outcomes include HCBS length of stay and costs, nursing home admission rates, functional status and satisfaction with care. To date, 704 clients have been enrolled in MCCP. Their mean age is 80, 63% live alone, 32% have cognitive impairments, and their mean nursing home risk score on the State screening instrument is 40 (range 29-77). The range of services used by clients has increased from a mean of 1.1 unique services pre MCCP to 3.5 post inception of MCCP. Cost data indicate that 500 active clients are required to break even under the current capitation rate. The evaluation design, client characteristics, and the implications of preliminary cost data for capitating HCBS for the frail elderly will be discussed.

Community Service Delivery System: A Network Perspective. Judy Y. Yip, M.A., David N. Grazman, Ph.D., Kathleen H. Wilber, Ph.D., & Robert C. Myrtle, D.P.A. Leonard Davis School of Gerontology and School of Public Administration, University of Southern California, Los Angeles, CA 90089.

The failure to develop more effective community-based long-term care delivery systems may stem from our limited understanding of how such systems are structured. Without such understanding, policy makers and service providers cannot efficiently and effectively coordinate services and target scarce community resources to address long-term care needs of elderly people. A network perspective offers a means to examine the structure of community-based long-term care in a more quantitative and systematic manner. Emphasizing how inter-organizational relations affect system efficiency and organizational behavior, this paper uses network analyses to explore the complex structure of the long-term care delivery system in terms of client referral, money transaction, and information exchange relations among service providers. Using the San Francisco, California community as an example, network analyses show that community service delivery has a 'structure' and that this structure is influenced more by informal relationship and information exchange among service providers than by government mandate and funding. Implications for how a network perspective can provide further insights for policy makers and service providers on interventions such as service integration and capitated funding are also discussed.

VARIATIONS IN MEDICARE HOME HEALTH AGENCY UTILIZATION: ANNUAL vs EPISODE UTILIZATION

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Two samples of 9,850 and 9,122 Medicare Current Beneficiary Survey (MCBS) respondents were selected from the 1992 and 1993 surveys, respectively. For respondents who utilized Medicare Home Health Agency (MHHA) services, 1,555 MHHA episodes of care were generated as well. Individual level data from the MCBS were linked to market area data from two files: the Area Resource File and the Provider of Service file. The model estimation procedure included annual and episode MHHA services utilization. In general, the study findings suggest great variations in MHHA utilization among aged Medicare beneficiaries and across market areas. Higher utilization was noted among MHHA users who were older, females, living alone, non-married, with lower income, and with higher levels of functional limitations or history of illness. The average utilization per user was higher in market areas with greater supply of home health care (HHC) service providers, larger share of for-profit HHC agencies, and fewer nursing home beds. Provider Characteristics had a significant impact on utilization as well. Other things being equal, MHHA users receiving services from a for-profit provider expected 19% more visits per MHHA episode, relative to those receiving services from other providers. Also, the number of visits per user during an episode of care was positively associated with the size of the agency and the diversity of its offered services. Overall, the study presents a major step toward understanding factors affecting MHHA utilization and has implications for future MHHA policies. The study identified a set of significant individual and market area factors associated with annual and episodic MHHA service utilization. Such findings can be further utilized in establishing MHHA capitation payment systems and monitoring service utilization.

CLINICAL OUTCOMES RESEARCH IN THE HOME HEALTH SETTING: THE CASE-MIX CHALLENGE

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In November 1996, the Center for Home Care Policy and Research at the Visiting Nurse Service of New York launched an agency-wide Outcomes Initiative. Researchers, clinical directors and quality assurance managers collaborated to incorporate standard, nationally validated clinician- and patient-based assessments into routine clinical practice. Assessments included the Outcomes Assessment Information Set (OASIS) and the SF-12. The information obtained from these assessments is analyzed by the Center and disseminated to key decision makers within the agency to facilitate understanding of the patient population, development of new programs, improvement of service delivery patterns, and quality assurance efforts. During the first three quarters of 1997, initial assessment data were collected for 4309 patients. Given the diversity of New York City, patient demographics and risk factors varied significantly across the four service delivery regions. Case-mix adjusted models were used to understand how patient characteristics and/or service delivery areas impacted utilization patterns and functional outcomes. Key factors included inpatient usage, ADL/IADLs, informal supports, and membership in an HMO. Case-mix adjustment either reduced or removed the variation observed among the four service delivery areas.

A COMPARISON OF HOME HEALTH CARE IN IRELAND, CANADA AND THE UNITED STATES: PHILOSOPHIES, POLICIES and IMPLEMENTATIONS

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Demographic trends and ever-increasing costs have necessitated a worldwide search for a home health care model, which is both cost effective and contributes to the quality of life of older adults. This analysis of the effectiveness of home health care in Ireland, Canada and the U.S. is based on policy analysis, interviews with government officials, and ethnographic fieldwork which examined the grass roots delivery of care in all three countries.

Findings indicate that sharp differences in philosophy, especially as concerns the role of profit making, play a leading role in shaping policy which in turn set the parameters of implementation. In Ireland, the implementation of a clear governmental policy to delivery care in the home, results in older people, who would be institutionalized in the U.S., being able to remain in their own homes. This is brought about by the careful coordination of services and an emphasis on the quality of life of older people in their own homes rather than the expensive use of high-tech acute care.

In New Brunswick, Canada, on the other hand, although all necessary home care services are available under the country's universal health care system, there is not a full commitment to providing the necessary resources for an effective home care system. This results in a general lack of coordination leading to delays and duplication of services and less cost effective care than could be provided if the services were better organized and sufficient resources made available. However, when compared to the fragmented, expensive and generally ineffective delivery of home health care in the U.S., the Canadian system appears to be light years ahead.

The results of this comparison clearly demonstrates the need in the U.S. for a home health care policy which commits providers to deliver as many services as possible in the home rather than in institutions.

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IMPACT OF ARTHRITIS ON DISABILITY-SPECIFIC DOMAINS AT FOUR YEARS.

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It is widely recognized that arthritis is a major contributor to disability among the elderly. However, at present we have little understanding of mechanisms through which the disease impacts specific domains of disability. This study assessed the longitudinal impact of joint impairment on overall disability and crossing domain-specific thresholds for physical activity, mobility, dexterity, IADL, and ADL that are associated with use of long term care. This four-year longitudinal prospective study obtained interview and physical exam data at baseline on 484 elderly people. Subsequent interviews were repeated biennially. Four-year trends showed a strong progression of increasing disability across all domains. Average disability doubled in all domains except physical activity, which was already high at baseline. Logistic regression assessed the contribution of demographics, psychological mediators, lower and upper extremity joint impairment, and comorbidities to increased disability above a threshold associated with use of long term care. Lower extremity joint impairment and age predicted crossing thresholds by Year 4 in physical activity, mobility, IADL and ADL disability that were associated with use of long term care. These findings suggest for the first time that lower extremity joint impairment is a specific and strong risk factor for disability that can lead to dependent living. These results indicate that the development and testing of both primary and secondary interventions for lower extremity joint impairment in older people should receive high priority.

SMOKING PATTERNS AMONG BLACK AMERICAN MEN AND WOMEN

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Smoking is a major contributor to a variety of diseases. The public health community has acknowledged "cigarette smoking [as] the chief preventable cause of premature death in the United States." Studies on cigarette smoking have focused primarily on men, with limited attention to black Americans. A clearer understanding of within group variations in health practices of black males and females will help in the development of culturally competent programs, designed to modify negative health behavior. Data from the national Health & Retirement Study (HRS), was used to examine gender differences in smoking habits among black Americans age fifty-one to sixty-one years of age.

Separate logistic regressions models were run on males and females, with particular attention to age, marital status, education, income, and health status. Findings show that a clear pattern of sociodemographic differences confirms that current male smokers are in the lower income and educational levels and less likely to be married. Smoking patterns among black females are less clear with no consistent pattern between education and smoking status. Smoking cessation programs must be tailored to meet black Americans diversity by gender, level of education, income and other characteristics commonly associated with health risk behaviors.

PROJECT INSIGHTS: EVALUATION OF A COMMUNITY VISION EDUCATION PROJECT

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According to The Lighthouse National Survey on Vision Loss, there is a high prevalence of older adults (20%) who accept diminished vision as a natural part of aging and assume nothing can be done. The lack of knowledge about the availability of services demands aggressive education and outreach. Project InSights was developed to promote awareness of age-related vision loss and rehabilitation by training older adult volunteers to conduct vision education programs for their peers. The program was implemented in the New York metropolitan area. In 1997, the results of a nine-month research evaluation were completed. The goals were to determine the effectiveness

of the project and to assess satisfaction by both volunteers and program attendees. Feedback was obtained from telephone interviews with 55 volunteers and 49 program attendees, as well as 560 program participant evaluations. Volunteers (87.3%) rated their experience as excellent or good and 98.1% would recommend becoming a volunteer to others. Attendees (90.4%) gained new information about age-related vision problems, and 95.7% shared info with someone else. This successful vision education project provides a cost-efficient model for other health promotion programs to consider.
SRPP8

SECONDARY CONDITIONS AMONG PERSONS AGING WITH LONG TERM PHYSICAL DISABILITY

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As individuals age with long-term physical disability many experience unanticipated declines in health and functional status. These problems which have been termed "secondary conditions" often threaten independence, productivity, and quality of life. This study describes the prevalence of different types of secondary conditions and examines the association between chronic diseases and impairment, changes in disability-related symptoms and changes in activity limitations among persons aging with disability. In addition, differences in the prevalence of these secondary conditions are examined by creating synthetic cohorts based on the intersection of chronological age and disability characteristics. The central hypothesis is that the frequency of secondary conditions will vary more by the severity of initial impairment and when in the disability trajectory these new health problems occur rather than by chronological age alone. Data are from a cross-sequential, group comparison study of 404 individuals, with polio (n=219) or rheumatoid arthritis (RA) (n=185). Participants were selected randomly from a pool and were stratified by chronological age, age of onset and/or duration of disability, and gender or ethnicity. The mean age of both samples was similar ($\bar{X}$=60 years) but groups differed by duration of disability (Polio $\bar{X}$=50 yrs. and R.A. $\bar{X}$=20 yrs.). Secondary conditions were operationalized as chronic diseases and impairments (e.g., diabetes, heart disease), changes in disability-related symptoms (e.g., pain, fatigue), and changes in activity limitations (i.e., ADLs, IADLs). Results demonstrate differences in the disability trajectory across samples. Findings are discussed in terms of the opportunities for improving interventions and the implications for public policy.

WORK AND FAMILY EFFECTS ON PHYSICAL ACTIVITY AMONG MIDLIFE ADULTS: EVIDENCE FROM THE NATIONAL SURVEY OF MIDLIFE DEVELOPMENT IN THE UNITED STATES (MIDUS)

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Regular physical activity is consistently found to promote health and well-being, unfortunately, however, as people age participation in regular exercise typically decline. Ironically, and contradicting what the health belief model of health behavior might predict, physical activity is reduced when the potential benefits of exercise are most proximal. The purpose of this study was to use a social ecological model of health behaviors to predict physical activity habits of midlife adults. Using data from a nationally representative sample of working adults (N=1,806), we hypothesized that family solidarity, work characteristics, and spillover between work and family would influence regular vigorous exercise, and regular moderate intensity activity. We further hypothesized that both positive and negative dimensions of psychological well-being would partially mediate the effects of family and work factors on physical activity, and that the effects of family and work factors on physical activity would be different for women and men. Results from multivariate logistic regression revealed that higher levels of emotional closeness with a spouse/partner, higher levels of decision latitude at work, and more positive spillover between work and family promoted both vigorous and moderate intensity activity. Modest evidence was found indicating that only the positive dimension of psychological well-being partially mediated the effects of work and family factors on physical activity. Finally, several robust gender interactions suggested that the effects of work and family on physical activity patterns are different for women and men. (SRPP-8)

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PRESERVING INDEPENDENCE AT THE END OF LIFE: A STUDY OF THE PREVALENCE OF ADVANCE DIRECTIVES AMONG THE HOMEBOUND ELDERLY.

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Americans prize autonomy, yet fewer than 25% of adults do advance care planning -- appointing health care proxies and executing living wills. Despite evidence that community-dwelling older adults wish to ensure future medical care is influenced by their preferences, even when they are no longer able to make choices, physicians and patients are reluctant to raise this issue. A 1995 chart review indicated that only 20% of patients at a geriatric clinic had advance directives. A follow-up retrospective chart review of a subset of elderly seen only at home was done to determine the prevalence of advance directives and variables associated with completion. This well-defined population was chosen for study because it is older, more frail, and seems to place more value on autonomy. Ages of the patients (n=88) ranged from 63-103 (mean age 85.7), 80.7% were female, 27.7% lived alone, and 45.5% carried a diagnosis of dementia. 10.2% of patients had executed living wills; 28.4% had designated health care proxies. A significant correlation (P=000) existed between chart notes indicating practitioners actively promoted advance care planning and advance directives; other variables (e.g. age, gender, living arrangements, diagnosis of dementia) were non-significant. Practitioners believe advance directives insure against expensive, unwanted medical interventions; yet in brief home visits, pressing medical concerns may preempt advance care planning. Further research is needed on the impact of shared responsibility for advance care planning between physicians and social workers and the impact of this practice modification on their autonomy and their care.

WHO COMPLETES ADVANCE DIRECTIVES AND REASONS WHY OR WHY NOT: A COMPARISON AMONG ETHNIC GROUPS IN HAWAII

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Advance directives allow people to direct treatment decisions in the event of incapacitation.

Yet less than 20% of Americans have them. The purpose of this study was to compare completion rates and reasons for or against their completion among 250 adults (125 senior-adult children pairs) in five ethnic groups--Caucasian, Chinese, Filipino, Japanese, and Hawaiian. In this sample, Caucasians were most likely to have completed living wills and durable power of attorney (DPOA) documents, while Filipinos and Hawaiians were least likely. Common reasons for not having a living will or DPOA were procrastination and "my family knows what I want." Over 30% of Caucasian, Hawaiian, and Japanese respondents were organ donors compared to less than 10% of Chinese and Filipinos. Most often stated reasons for not being an organ donor were "being too old" or feeling it was against their culture or religion. Generational differences were evident, with more seniors completing wills and living wills and more adult children being organ donors. Even controlling for education and generation, however, ethnic differences were still evident and appeared culturally-based. Findings suggest strategies for improving education on advance directives and organ donation among ethnic minorities.

PREDICTORS OF ADVANCE DIRECTIVES IN INSTITUTIONALIZED ELDERLY.

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A cross-sectional study design was used to conduct interviews with 133 cognitively alert residents from 13 nursing facilities (profit/non-profit, urban/suburban) in Cleveland to understand the extent to which individual differences influenced implementation of Advance Directives (ADs). Locus of control theory examined the influence of external (God/religious beliefs; family support) and internal (self-directedness) values in relation to implementing ADs. Other variables drawn from the literature included knowledge (legal/medical terms) of ADs, fear of death, health and demographic characteristics.

The sample was equally represented by Jews, Catholics and Protestants; was largely female, Caucasian, on Medicaid, with an average age of 83 years, a mean Mini Mental State Exam score of 26, and over half had ADs. Multiple regression analyses revealed that higher education, being Jewish, and being Catholic predicted having ADs in place. The findings on religious affiliation are interesting, and perhaps support the religious literature which suggests that the Jewish faith (Talmud) has definitive views on maintaining life; while the Catholic church has recently promoted the idea of a "good and peaceful death" and of implementing ADs. In fact, Jews in our sample also wanted greater life-prolonging treatments compared to Catholics or Protestants. Despite the limitations of the study and the need to conduct further research, practitioners need to understand individual educational and religious differences in promoting the use of ADs.

PHYSICIAN ASSISTED SUICIDE: ROLE OF PRACTICE PATTERNS AND PROFESSIONAL DISCIPLINE

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As public debate about PAS intensifies, physicians' views grow increasingly relevant to policymakers. A random sample of 1,920 physicians in Connecticut was drawn from three areas of practice: psychiatry, internal medicine, and family practice. A two-wave mailing yielded 397 anonymously completed surveys (response rate 20 7%, n=186 psychiatrists, 119 IM and 76 FP). Data include: demographics, religion, practice patterns, personal views on PAS, factors affecting such views, and experience with depression and suicide. Most responses were measured on a 4 point Likert scale.

Multivariate analyses indicated significant differences among the groups regarding whether physicians should be permitted to: withdraw nutrition/hydration (p< 0001), prescribe analgesics (p< 05), write a lethal prescription (p< 01), administer a lethal prescription (p< 01). Moral acceptability of PAS differed (p< 01), as did views on palliative care (p< 001). Ordered logit indicated those with a greater percentage of patients > 65 were significantly less likely (p< 01) to support writing or administering lethal prescriptions. The polarized views of physicians on PAS issue present substantial challenges to the development of state laws in this arena.

REASONS FOR CONSIDERING PHYSICIAN-ASSISTED SUICIDE: FAMILY REFLECTIONS.

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Surveys suggest that 2-18% of physicians participate in physician-assisted suicide (PAS) by prescribing medications for their patients. Physicians consider pain and nonphysical suffering to be the principal reasons for the requests. Patient and/or family descriptions of the illness experiences and reasoning are very limited.

We audiotaped and transcribed semi-structured interviews with family members after the deaths of people who considered PAS. We then coded the transcripts using ethnographic qualitative methods. The study was approved by the University of Washington IRB.

To date, we have interviewed families of 16 patients who considered PAS. All cases involved white adults; 6 were women. Thirteen had terminal illness: metastatic cancer (6), AIDS (5), multiple sclerosis (1), and vascular dementia (1). The 3 people without terminal illness had a stroke, an autoimmune disease, and Parkinson's disease. Hospice care was involved in 7 cases. The manner of death for the 16 cases included: PAS (8), natural (1), gunshot wound (1), and voluntary active euthanasia (6). In three of the latter cases, the patient had lost decisional capacity.

In most cases, the patient had expressed long-standing beliefs in PAS as an alternative to a degrading, prolonged dying experience. None of the patients pursued PAS due to depression. Prominent reasons for interest in PAS were: loss of control and independence or fear thereof; being tired of fighting; being in intractable pain or requiring sedation as the alternative; fear of cognitive impairment; and the desire to avoid an undignified death.

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Physician prediction of Hospital Length of Stay (L.O.S). A Prospective Study in Elderly

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PURPOSE: To investigate the correleation between expected L.O.S. reported by admitting physician and the actual hospital length of stay (L.O.S.) .

METHODS: Data was collected for 112 consecutive admissions in a large community hospital for all patients above the age of 65. Ten patients were excluded: nine patients expired and one had incomplete data. There were 5 readmissions. Total of patients in the study was 102. Data regarding expected L.O.S. was obtained from the admitting physician within 48 hours of the admission day. The above data was collected by the nurse manager of each medical floor. Pearson correlation coefficient was considered significant if $P \leq 0.05$.

RESULTS: Total patients in the study was 102. The actual L.O.S was reported to be 4.83 (standard deviation ± 3.8) days higher than expected L.O.S. predicted by physicians on the admission day. There was no correlation between actual L.O.S and the physician ability to predict L.O.S. ($P = 0.997$).

CONCLUSION: There was poor correlation between expected L.O.S. predicted by the admitting physician and the actual L.O.S. in elderly patients.

Topic A Comparison of Hospital-Based Discharge Planning: United States and Taiwan

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Presentation Format Poster

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The purpose of this study is to describe discharge planning utilization in a large medical center in Taichung, Taiwan. Relevant concepts related to discharge planning will be reviewed including: discharge planning models, the process of discharge planning, and the advantages and disadvantages will be compared between Taiwan and the United States.

In Taiwan, discharge planning is a new idea and was introduced to hospitals when National Health Insurance was implemented in 1990. Hospitals in Taiwan are now under increased pressure to manage costs. Some hospitals have started to implement discharge planning, but the history of discharge planning in Taiwan is less than 10 years. The hospitals which do use discharge planning use the consultant model authorizing a nurse or a social worker to be a discharge planner.

On the other hand, discharge planning has been used since the beginning of the twentieth century in the United States. Its use has increased steadily since the 1970s when PPSs and DRGs were implemented. Research studies support the use of discharge planning to reduce costs for hospitals and patients. Additionally, discharge planning can increase patient satisfaction as it is reported that patients receive better quality care. Although discharge planning is in different developmental stages, discharge planning is viewed as a way to reduce costs either in the USA or Taiwan.

PREFERRED POLICIES AND PRACTICES FOR HIGH-TECH HOME CARE PROVIDERS

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Advances in medical technology have increased the capacity to provide high-tech care in the homes of the impaired elderly. Many home health agencies are expanding their services in this area. Research findings from a national survey of 154 home health care agency executives have led to the development of a preferred set of programmatic practices for allied health professionals in high-tech care.

Based on the premise that patient care challenges in high-tech care can be substantially different from traditional home health, a critical set of screening questions for assessing prospective patients is offered. Key policies and procedures needed by agencies offering high-tech care are specified as are training criteria for staff, patients, and family caregivers. Approaches for dealing with the legal and ethical demands of delivering high-tech care are delineated and the most efficacious strategies for marketing such services highlighted. The benefits and drawbacks of providing high-tech care both for providers and consumers are underscored as are differences in best practices by agencies varying in size, budget, auspice and length of experience.

THE ROLE OF GERIATRIC ASSESSMENT TEAMS IN THE DELIVERY OF GERIATRIC CARE IN THE 21ST CENTURY

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Geriatric Assessment Teams (GATs) have been widely used in the United States since the early 1970s. GATs have been heralded as vehicles for coordinating services, improving patient outcomes, and controlling health care costs for the elderly. Despite these optimistic claims for health care delivery, GATs contain numerous variations which could influence their effectiveness.

Longitudinal data from a content analysis of the GAT literature over the past 20 years is examined to explore differences in size and type of GAT, purpose of GAT, types of clients assessed, and the link between GAT recommendations and utilization of services by elderly patients. GAT studies from the period 1977 to 1997 are analyzed using manifest and latent content analysis to explore the linkages between GAT characteristics and their effectiveness for key areas of service delivery – coordination of services, patient outcomes, and controlling costs.

Findings include that nearly half of the GATs have purposes related service coordination of services, one-third are instituted to effect patient outcomes, and one-fifth have cost containment as their primary purpose. The strength of the link between GAT recommendations for services and actual patient utilization of services is strongest for GATs with coordination of care or cost containment as their primary purpose.

ACCESS TO HEALTH CARE AND SELF-RATED HEALTH AMONG COMMUNITY-DWELLING OLDER ADULTS

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This study examined the relationship between access to health care and self-rated health among community-dwelling persons aged 65+. The analyses were based on a sample of 2,829 respondents from the Duke Established Populations for Epidemiologic Studies of the Elderly. Access indicators, self-rated health, and covariates were measured at baseline with self-rated health also measured 3 years later. An ordinary least squares residualized change model adjusted for the effects of demographics, utilization, health behaviors, objective health status, and functional measures. Measuring access in terms of Medicare, Medicaid, other health insurance, perceived financial limitations, transportation, knowledge of services, and having usual place of care, results indicated that those who receive Medicaid and have perceived financial limitations were more likely to report poorer self-rated health. Further work is required to establish solid causal linkages between access indicators and measures of outcome such as self-rated health, mortality, morbidity, and disability among elderly individuals. SRPP-10

Elderly Uninsured: An experience of the Taiwanese Immigrants

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While the majority of the elderly are insured through Medicare or private insurance in the United States, the diverse aging population in the next thirty years will have more older adults experiencing late life without health insurance. This study examines the demographic differences between the insured and uninsured elderly immigrants from Taiwan. Based on the 1994 Taiwanese American Elderly Survey (n=204), 23.5 percent of the older Taiwanese did not have any type of health insurance. Bivariate analyses revealed that those who have a health insurance were significantly different in gender, marital status, living arrangement, duration of immigration, and financial status. In addition, health status in both objective and subjective measurements were not associated with having a health insurance. It appears that many older Taiwanese were uninsured despite of frailty and disability due to mostly sociostructural factors. Results suggest that interventions and policy advocacy are needed to improve the health coverage of elderly immigrants from Taiwan.

HMO AND THE ELDERLY: HOW DOES THE ELDERLY FARE IN HMOs? J.S. Lee, VNS of New York, Center for Home Care Policy and Research, 107 East 70th Street, New York, N.Y. 10021

The 1993 Medicare Current Beneficiary Survey is used to examine the correlates of health service use (physician, outpatient department, and specialist visits) among elderly Medicare beneficiaries. Specifically two questions are evaluated: (1) the role of membership in different types of health plans in predicting health service use, and (2) the role of functional impairment in predicting health service use. The study focuses on elderly Medicare beneficiaries who are enrolled in health maintenance organizations (HMOs) and uses the elderly Medicare beneficiaries enrolled in traditional fee-for-service (FFS) plans as a comparison group. Andersen's Behavioral Model is used as the conceptual framework for analysis. The study presents a profile of Medicare beneficiaries enrolled in HMO and FFS plans and uses logistic regression modeling to determine if membership to different types of health plans and functional impairment are predictors of physician visits, outpatient department visits, and specialist visits. Findings from the study indicate differences in gender, race, living arrangement, income, region of residence, Medicaid eligibility, self-rated health status, and level of functional impairments among elderly Medicare beneficiaries enrolled in HMOs and FFS plans. Membership to different health plan types (HMO or FFS) had a significant impact on physician and specialist visits. However, functional impairments made a significant impact only on outpatient department visits. The study also found that satisfaction with care was an important predictor of health service use. Implication for social work practice and policies to improve access to care among functionally impaired elderly patients are discussed.

HMO-FFS AMBULATORY CARE SENSITIVE (ACS) HOSPITAL ADMISSIONS AMONG AGED MEDICARE BENEFICIARIES

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Concerns gave been raised that aged Medicare HMO enrollees with the greatest needs for better management and access to care will not be able to effectively negotiate the HMO delivery system to actually gain improved access. Greater inpatient ACS admissions have been used (with some modifications for elders) to measure relative "access" under the premise that the medical conditions responsible for admission can usually be managed quite successfully with timely and effective ambulatory care. State hospital discharge data and Medicare eligibility files from four states were used to compare the ACS hospital use of aged Medicare HMO enrollees and their fee-for-service (FFS) beneficiary counterparts. While HMO enrollees had lower overall adjusted hospital use rates, only modest HMO-FFS differences were found for ACS discharges. Differences in the diagnostic profiles of Medicare HMO and FFS hospitalizations appear to be more reflective of favorable risk selection in enrollment than HMO access barriers.

"Managing Complaints in the Medicare System: Who's in Charge?"

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This paper examines the process whereby the Medicare system addresses enrollee concerns about the quality and delivery of health care. We conducted a two-part study of Medicare complaint procedures. First, a sample of complaint filed with the HCFA-designated Medicare Physician Review Organization for California (CMRI) was analyzed and quantified, to examine the types of complaints filed, the investigation and resolution process used, and the methodology used for complaint intake. Second, we conducted a content analysis and comparison of the sources of Medicare complaint procedure. We found that the system of financing and delivering health care makes for a complex process of oversight and of responding to consumer concerns, even within the Medicare system. Different regulatory systems operate independently of one another, with little sharing of data or methodology, and the civil litigation remedies are episodic and narrowly focused. Finally, even within the Medicare system, standards and practices vary depending on the population affected (privately insured, Medicare or Medicaid); geographic location or state regulatory environment; and community norms and expectations. The complaint mechanisms in Medicare (and in the private sector as well) at the same time lack a mechanism for early efficient resolution of simple complaints, and an implementable standard of due process, resulting in an overly complex and duplicative system for management and resolution of health care conflicts that requires providers to provide data that is not necessarily responsive to the complaint, or helpful to the complainant.

A HEALTH CARE SYSTEM DESIGNED TO MEET THE NEEDS OF THE CHRONICALLY ILL ELDERLY IN AN UNDERSERVED POPULATION

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The traditional HMO focuses on disease prevention in healthy populations, but the interrelated medical, social and functional problems of the frail elderly have not been addressed. A program was established in 1993 to meet the needs of the chronically ill elderly in an underserved population. Environmental and process adaptations were made in every setting. A house call program was began. Group therapy is held on the acute care ward biweekly. Since its inception, the program has served over 2000 patients. In 1997 there were 2960 clinic visits, 250 home visits, 304 skilled nursing unit discharges, the average daily acute care census was 17 and case managers received 8,800 phone calls. 80% of the patients belong to a minority group with an average monthly income of $536. Mean Katz ADL and Lawton IADL scores were 3.8/6 and 2.8/8 respectively. Nursing home placement rate was 8% overall. Patient surveys demonstrated 99% satisfaction with a 60% increase in enrollment over the last two years. We will present ways that health care systems can adapt to meet the needs of chronically ill elders.

The Working Poor, Near-Old and Means-Tested Medicare Enrollment

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Presidential initiatives to permit 55+ adults to purchase into Medicare have been predicted to have little success because the population is too poor to take advantage of the opportunity. These same proposals have been moot for the working poor because the working poor were never considered to be participants in the buy-in proposals. The middle income population aged 55+ has had significantly higher life time histories of health insurance coverage than the working poor of comparable age which indicates that the working poor will bring more undetected, undiagnosed and late stage chronic conditions to the health care system upon reaching Medicare eligibility at age 65 than will the middle income population, even if the middle income group is uninsured immediately prior to becoming eligible for Medicare. The epidemiological profiles of working poor and middle income pre-Medicare populations will be compared and assessed regarding potential economic benefits to Medicare in the long run if the working poor, 55+ population were to be means-tested for eligibility to government funded Medicare benefits. The analysis will support the proposition that the working poor should be offered means-tested Medicare benefits at age 55.

OUT-OF-POCKET HEALTH EXPENDITURES BY ADULTS 70+

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Out-of-pocket health expenditures are examined in a large, nationally representative longitudinal sample of

USE OF LONG TERM CARE ADMINISTRATIVE DATASETS IN HEALTH SERVICES RESEARCH

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This research reports on problems encountered and solutions employed in using of long term care adminstrative data for health services research.

Long term care institutions, whether independent or part of integrated delivery systems, are entering into risk-based contracts to constrain costs and remain competitive in the health care marketplace. Managed care contracts ought to utilize actuarial assessment of risk for the services covered to predict costs and establish capitation rates, and there is a serious dearth of data required to accomplish this task. Yet many long term care institutions have years of resident data collected for reporting to state and federal agencies. While known to be notorious for errors in data, long term care administrative datasets, such as the MDS, can be used to better understand long term care costs, which this research demonstrates.

ANALYSIS OF LONGITUDINAL OUTCOMES IN A NURSING HOME POPULATION USING DATA FROM THE MDS AND MDS 2.0.

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This study analyzed data derived from the MDS and the MDS 2.0 on 11,000 residents of a large long term care facility over a period of seven years. The research yielded robust results on functional, cognitive, and behavioral changes over time experienced by subjects who resided in the facility for more than three years, the subset of residents who account for the an extremely large proportion nursing home costs. The improved ability to predict future resource utilization of this costly group has enormous implications for the nascent but burgeoning field of managed care risk contracts for long term care.

DIFFERENTIAL IMPACT OF ALZHEIMER'S DISEASE AND ETHNICITY ON SERVICE UTILIZATION PATTERNS.

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Alzheimer's disease affects as many as 400,000 people in California alone, and a large number of patients are ethnic minorities. This study explores the role of ethnicity on service utilization. Data are based on a sample (*n* = 1569) of subjects diagnosed as having possible or probable Alzheimer's disease in 1993 at the nine university-based Alzheimer's Disease Diagnostic and Treatment Centers (ADDTCs) established through the California Department of Health Services (DHS). Demographic variables; service utilization patterns of counseling, primary care, physician services, transportation services, Alzheimer's day care resource centers; and behavioral, functional and cognitive characteristics such as establishing power of attorney and durable power of attorney for health care (DPAHC) are compared across ethnic groups composed of Whites, Hispanics, African Americans, Asian and Pacific Islander Americans, and Native Americans. University of Southern California-St. Barnabas (USC-SB) ADDTC site, located in an inner city section of Los Angeles, has a significantly larger ethnic minority population. Its data are run against the other eight ADDTC sites for statistical differences. Ethnicity is found to be a significant barrier to Alzheimer's service utilization when other factors are controlled. Public policy initiatives are suggested to correct the existing disparities by maximizing service availability and streamlining service delivery systems within the means of resources.

HEALTH SERVICES UTILIZATION AND POVERTY

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Aim of the study is to evaluate the interaction between economical conditions (EC) and health in the very old citizens. Data are taken from 420 elderly subjects living at home (84% of the 82-87 year old residents in the city of Brescia, mean age 84.6±1.4, females 76%, living alone 46.8%, MMSE 23.5±6.1). Poverty was considered when persons have difficulties of getting money to buy necessary dresses, to heat their houses or to satisfy extraordinary needs, e.g. to repair the house. Being poor was directly associated with the number of chronic diseases ($p=.013$). Moreover, in a multiple logistic regression analysis, being poor was also found independently associated to hospitalization during the year previous to the interview (RR 1.6, 95% C.I. 1-2.6). In our very old population the use of health services is related with social and EC. In fact, apart from diseases (1 or more active chronic diseases RR 1.5, 95% C.I. 1-2.4) and disability (disabled in BADL RR 1.3, 95% C.I. 1-1.6), independent predictors of hospitalization were "non health related negative events" (RR 2.0, 95% C.I. 1.3-3.2). The condition of living alone and cognitive impairment were not found independent predictors of health services utilization. These data confirm the interaction between EC and health in the very old citizens and stress the debate on the role of what is strictly related with health and what is relevant for the general wellbeing of the population in determining the use of resources. Old citizens, in particular, which are the most frail part of the population, are sensitive to environmental modifications, suggesting that any decision regarding their EC has important consequences not only on health but also on services utilization.

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Depression in Older Adults: The Right to Feel Better

One (30 minute)/color videotape/1998
Produced by Duke University School of Medicine

7447 adults age 70 and over (the AHEAD dataset). In 1993, 4872 households reported out-of-pocket expenses, and the mean reported household expenditure (for hospital, doctor, outpatient, dental, nursing home, and other medical services) for one year was $970. The mean yearly cost for nursing home care (for the 53 who needed it) was $8779. Mean expenditures on insurance were $1283 a year per person in 1993. The mean monthly cost for prescription medications was $101 in 1995. The proportion of users reporting uncovered costs for different services varied across services: 16% of home care users, 21% of those with hospital stays, and 64% of those requiring prescription medications reported costs not covered by Medicare, Medicaid or private insurance. Of the households reporting out-of-pocket health costs, 17% spent over 10% of their income on medical, dental, and/or nursing home care, and 2% spent over 50% of their income. Significant predictors of greater out-of-pocket costs were: being older, having more years of education, reporting heart disease, cancer or diabetes, being depressed, having more functional (ADL) impairments, reporting lower self-rated health, and having a higher income. Supplemental insurance or Medicaid coverage predicted lower out-of-pocket costs. Predictors of high costs at each time point are compared to predictors of increased costs over time.

MEDICAL VULNERABILITY AND GRADATION OF DIAGNOSES

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By the year 2000, the Health Care Financing Administration (HCFA) is expected to adopt a diagnostic-based payment approach to pay managed care organizations. Since payments are closely linked to diagnoses in such an approach, we examined the relationship between diagnoses, disability, self-reported health status, and expected Medicare costs using the concept of "Medical vulnerability," which is defined as the expected value of future Medicare costs, measured in relation to average local Medicare costs. A regression model to predict 1994 Medicare costs was developed using 1991-1994 Medicare Current Beneficiary Surveys (MCBS). A vulnerability index consisting of 5 categories – very low, low, moderate, high, and very high - was then developed using the predicted Medicare costs for 1994. Results show that community elderly who are 84+ and dually eligibles are more likely to be represented in the highest vulnerability category. Both disability and self-reported status are directly associated with predicted Medicare costs. The relationship between diagnoses and medical vulnerability show an interesting pattern of gradation, both in terms of what diagnoses are represented in each of the vulnerability categories, and in terms of the proportion of persons with a given diagnosis represented in each of the vulnerability categories. In the very low vulnerability category only 3 diagnoses are reported by 15 percent or more persons compared to 13 diagnoses reported by 15 percent or more persons in the very high vulnerability category. Only 11 percent of persons report cancer in the very low vulnerability category compared to 24 percent who report cancer in the very high vulnerability category. These relationships are examined separately for community dwelling elderly, nursing home elderly, and community dwelling dually eligibles. The gradation of diagnoses with respect to medical vulnerability has strong implications for payment approaches using diagnoses for case-mix adjustments.

CONSUMER MONITORING OF HMO MARKETING PRACTICES TO MEDICARE BENEFICIARIES

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In recent years HMOs have become increasingly interested in marketing products to Medicare beneficiaries. As elder interest and enrollment in managed care increases, the area of HMO sales and marketing practices is of critical concern, but has been largely unexamined. This study used Medicare beneficiaries and consumer advocates to monitor the marketing practices of HMOs in four states at different stages of Medicare HMO development; HMO penetration in the Medicare segment of the market ranged from 9% to 40%. Participants examined a range of marketing techniques, including advertising, responses to telephone inquiries, and group and individual sales presentations. The study monitored the accuracy and completeness of the material presented, the extent of improper inducement to enroll, attempts by the HMOs to discourage the enrollment of beneficiaries with serious medical problems or disabilities, and the ability of the plans to respond to linguistic minorities. While results varied between states and HMOs, the study identified a number of problems, including incomplete information on 1) which providers are in the network, 2) restrictions in provider choice, and 3) consequences of disenrollment. The project also found that the ability of consumer groups to monitor the marketing practices of HMOs varied considerably depending on past experience with managed care issues. A consumer guide for conducting HMO monitoring projects was developed.

RELATIONSHIP OF ACADEMIC AFFILIATION AND HEALTH CARE COSTS OF DUALLY ELIGIBLE SENIORS.

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This cross-sectional study compares the mean monthly costs of services (total and divided into nine subcategories) for up to one year for 2422 dually eligible (Medicare and Medicaid) enrollees in a managed care system that includes two different types of primary care clinics: Academic Providers (AP), which include multiple primary clinics that serve as teaching sites for primary care residency programs, and Community Providers (CP) which include care providers in non-teaching clinic settings. Health care costs of all dually eligible patients served by a single HMO plan were initially adjusted for age, sex, residence (nursing home vs. community) and months enrolled over the 12-month study period. Subsequently, a severity index composed of total number of diagnostic clusters was also included to adjust the cost data. Total mean monthly costs of members unadjusted for severity were 13% higher for the AP group (N=711) than for the CP group (N-1711), although the difference was not significant p= 18. When adjusted for severity, the AP group had a total cost that was 30% lower than the CP group $p < .001$. A similar pattern of statistically significant decrease in cost in the AP group to below CP cost after severity adjustment is noted in eight of the nine subcategories of cost data. This data suggests that, although care provided in academic primary care settings for dually eligible seniors is somewhat more costly when unadjusted for severity, with severity adjustment the cost of care by AP clinics is actually lower.

This video presents interviews with older adults who have experienced or are experiencing depression in late life. Commentary from several professionals, including Dr. Dan Blazer and Lisa Gwyther, expands upon the issues brought out in the interviews.

Topics covered include:

☐ Prevalence
☐ Causes
☐ Treatment Modalities
☐ Suicide Risk
☐ Issues for Long Term Care
☐ Public Policy

Intended for use by students and professionals in gerontology, as well as those working in all forms of long term care.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

THE MANY FACES OF DEPRESSION
One (20 minute)/Color videotape/1998.
Developed by Pfizer US Pharmaceuticals in collaboration with the Eden Communications Group and After Five Productions, with sponsorship by the National Council on the Aging and the American Association for Geriatric Psychiatry.

This videotape on late-life depression is intended for public education programs, workshops, and discussion groups with psychiatrists and other mental health providers in a variety of settings. Older patients of several races who have suffered and recovered from depression illustrate its diversity through their own stories, and a geriatric psychiatrist teaches about its causes, recognition, and effective treatments. Its central, destigmatizing message is one of information and hope, prompting older adults and their families to identify the signs and symptoms of the illness early and to get the help they need.

Contact: Soo Borson, M.D., University of Washington Department of Psychiatry and Behavioral Sciences, Box 356560, 1959 NE Pacific Street, Seattle, WA 98195-6560.

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AGHE SYMPOSIUM ON TEACHING RESEARCH IN GERONTOLOGY.

D. Shenk, UNC Charlotte, 9201 University City Boulevard, Charlotte, NC 28223-0001

Participants:

K. S. Moore (Mt. Mary College, Milwaukee, WI 53222) Integrating Research Methods into a Gerontology Minor.

B. J. Fisher (Southwest Missouri State University, Springfield, MO 65804) The Practicum and Opportunities for Qualitative Research.

J. Mitchell (Center on Aging, East Carolina University, Greenville, NC 27858-4354) Teaching Graduate-Level Certificate Students to be Consumers of Research.

J. R. Peacock (UNC Charlotte, Charlotte, NC 28223-0001) A Master's Level Research Methods Series.

G. D. Rowles, B. J. McCulloch, D. R. Richardson (Ph.D. Program in Gerontology, U of Kentucky, Lexington, KY 40536) Research Training Innovation in a Gerontology Ph.D. Program.

Discussant:

D. Shenk (UNC Charlotte, Charlotte, NC)

As an interdisciplinary and multidisciplinary field, students come to gerontology from a broad range of backgrounds and with diverse experiences. Students also study gerontology at various academic levels from associate degree to undergraduate minor and major, to graduate-level certificate, Master's degree and Ph.D. This situation offers particular challenges in terms of ascertaining and teaching what students need to know to effectively use and successfully undertake research in gerontology. The participants in this session will each discuss issues related to teaching research methods and approaches to gerontology students at various educational levels. Presentations include examples of how the teaching of research is being approached in an undergraduate minor, undergraduate major, graduate certificate, Master's and Ph.D. program.

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WORDS FROM THE WISE: GERONTOLOGISTS CONCEPTUALIZING PRACTICE IN THE CONTEXT OF POLICY AND SOCIAL CHANGE.

Organizers and Discussants:

H.J. Moulton, Columbia University School of Public Health, Division of Sociomedical Sciences, 600 West 168th Street, 7th Floor, New York, NY 10032 & K. Linkins, University of California – San Francisco, Institute for Health and Aging, San Francisco, CA 94143.

Participants:

W. Benson, (Environmental Alliance for Senior Involvement - EASI, Catlett, VA).

R. Hudson, (Boston University, Boston, MA 02215).

M. Moon, (The Urban Institute, Washington, DC 20037).

F. Torres-Gil, (University of California - Los Angeles, CA).

In the United States, there are many institutional policies and programs that deal with individual aging. However, increasingly there is a need to address issues associated with "population aging," especially given the demographic changes projected for the coming decades. The major challenge facing gerontologists and policy analysts will be to understand both individual and population aging in the broader societal and policy context. In this session, a distinguished group of gerontologists will discuss their experiences integrating gerontological theories and practice into policy, and how policy shapes gerontological practice. The panelists will also address the issue of how both practice and policy might need to be revised and reinterpreted to meet the future needs of the aging population.

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Recent Developments in the Genetics of Replicative Senescence

Chair: Judith Campisi, Berkeley National Laboratories

Walter Funk, Geron Corporation, "Role of Telomeres in Cell Senescence, Cancer and Aging"

Olivia Pereira-Smith, Baylor College of Medicine, "Genes that Control Cell Senescence and Immortality"

Gretchen Stein, University of Colorado, "Control of Gene Expression During Replicative Senescence"

Judith Campisi, Berkeley National Laboratories, "Cell Senescence in Cancer and Aging"

Most normal eukaryotic cells undergo replicative senescence, which limits the number of divisions through which cells can proceed. Replicative senescence has been proposed to be a tumor suppression mechanisms, and to contribute to organismic aging. This symposium will explore some recent advances that have been made in understanding the molecular basis for the replicative senescence of cells and the relationship of this process to cancer and aging.

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The Potential Role of DNA Polymorphisms in Human Longevity

Chair: Huber Warner, National Institute on Aging, Bethesda, MD

Eugenia Wang, Lady Davis Research Institute, Montreal, Canada, "Do Genes Regulating Apoptosis Contribute to Longevity of Humans"

George Martin, Junko Oshima & Elena Castro, Department of Pathology, University of Washington, "A Progress Report on the Role of Werner Helicase Polymorphisms in the Pathobiology of Aging"

Phillip G. Febbo, Dana Farber Cancer Institute, "The CAG Repeat Polymorphsim in the Human Androgen Receptor: Epidemiologic Associations with the Behavior and Mortality of Prostate Cancer"

"Successful Aging" was coined to denote one end of a spectrum of considerable variation among individuals in their aging trajectories. This variation is observed both in terms of lifespan and age-related morbidity. The growing numbers of relatively healthy centenarians underscores the fact that individual deviations from mean longevity can be as great as several decades. This observation coupled with genetic studies showing that longevity has a heritable component indicates that understanding the basis for individual differences in lifespan may be a fruitful avenue for investigating genetic and physiological causes of aging. This symposium will highlight three distinct examples in which genetic polymorphisms may influence aging processes, and should stimulate dialogue and further critical evaluation of the hypothesis that DNA polymorphisms play a role in the genetics of aging.

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IN WHAT WAYS DOES DIABETES IN THE ELDERLY DIFFERENT FROM THAT OF MIDDLE-AGE?

N Barziali, Division of Geriatrics, and the Diabetes Research and Training Center, Albert Einstein College of Medicine, 1300 Morris Park Ave, Belfer #701, Bronx, NY, 10461.

Participants:

N Barziali, (Albert Einstein College of Medicine, Bronx, NY)

Changes in body composition with aging: Relationship to diabetes and atherosclerosis.

G. S. Meneilly (The Universityof Brotish Colombia, Vancouver, B.C. Canada).

Metabolic alterations in elderly patients with diabetes

J. E. Morley, (St. Louis VAMC and St. Louis University, St. Louis, MO)

Clinical aspects of diabetes in older persons.

Discussant:

J.B. Halter (University of Michigan and VA Medical Center, Ann Arbor, Michigan)

Aging is typically associated with increases in total and visceral fat mass, while lean body mass is often decreased. The reasre are multiple reasons for these changes including hormonal and life style related. These changes in body composition are often associated with insulin resistance, impaired glucose tolerance, diabetes, and are also associated with risk factors for accelerated atherosclerosis and coronary artery disease, hypertension and hyperlipidemia. These issues will be further examined.

Glucose levels are tightly regulated by the combined function of the **muscle** to dispose of postprandial glucose, the **liver** to provide for fasting glucose production, and the **ß-cells** of the pancreas to regulate both by secreting appropriate amounts of insulin. The liver maintains normal glucose levels postprandially and during fasting, but with aging more insulin is required to appropriately regulate hepatic glucose production and avoid hyperglycemia. While ß-cell insulin secretion may compensate for the resistance to insulin action of the muscle and liver, elderly subjects with and with-out obesity may fail to respond by secreting adequate amounts of insulin, and will develop diabetes mellitus.

Understanding this multi-organ pathophysiology of diabetes in the elderly is clinically relevant, because present and future pharmacologic therapies aim to reverse specific organ defects, and often act synergistically to decrease hyperglycemia. The role and usage of current available drugs, such as Glucophage, Rezulin, will be further discussed.

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PUBLIC USE DATASETS TO STUDY HEALTH OUTCOMES: HIP FRACTURE AS AN EXAMPLE

L. Fredman & J. Magaziner. Dept. Epidemiology & Preventive Medicine, School of Medicine, U. Maryland, Baltimore, MD 21201.

Participants:

J. Magaziner (Dept. Epidemiology & Preventive Medicine, School of Medicine, U. Maryland, Baltimore, MD 21201) Survival and changes in function, bone density and muscle after hip fracture: can we estimate excess mortality and morbidity?

L. Fredman (Dept. Epidemiology & Preventive Medicine, School of Medicine, U. Maryland, Baltimore, MD 21201) Functional decline following hip fracture: comparison of a cohort of hip fracture patients with EPESE participants.

J.A. Grisso (Center for Clinical Epidemiology & Biostatistics, U. Penn. School of Medicine, Philadelphia, PA 19104) Generalizability of hip fracture studies: assessing the representativeness of study samples through public use datasets.

F.D. Wolinsky (School of Public Health, Saint Louis University, St. Louis, MO 63108) Making the most of multi-source datasets that include baseline and follow-up interviews linked with Medicare claims and mortality data.

Discussants:

J.M. Guralnik (National Institute on Aging, Bethesda, MD)

J. Mossey (School of Public Health, Alleghany U. Health Sciences, Philadelphia, PA 19102).

Public use datasets may be used by themselves, or in combination with an investigator's dataset, to evaluate health outcomes: the large size, representativeness, long followup, and type of data contained in these datasets provide research opportunities that might not be possible with smaller datasets. We will present four different studies of hip fracture as a springboard to discuss the benefits, methodological challenges, and drawbacks of using public use datasets. In one study, several datasets were merged with 3 cohorts of hip fracture patients to compare health changes in hip fracture patients versus controls, such as using the Longitudinal Study on Aging (LSOA) sample to evaluate excess mortality following hip fracture. A second study using LSOA compared hospitalizations, functional decline, and mortality of persons with and without hip fracture. The third study used an Established Populations of Epidemiologic Studies of the Elderly (EPESE) subsample to evaluate functional decline among hip fracture patients compared to community controls. The fourth study used EPESE data to estimate the representativeness of a sample of hip fracture patients. Presenters will discuss how public use datasets may extend data collected for a particular study, decisions regarding selection of controls, identification of common variables, choice of statistical techniques, and future research directions of such research.

SURVIVAL AND CHANGES IN FUNCTION, BONE DENSITY AND MUSCLE AFTER HIP FRACTURE: CAN WE ESTIMATE EXCESS MORTALITY AND MORBIDITY?

J. Magaziner, Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland, Baltimore, MD 21201.

Between 18-33% of persons who fracture a hip die in the year following the fracture and as many as 50% do not return to pre-fracture levels of functioning. This presentation will: 1) describe survival patterns and trajectories of change in multiple areas of function, bone mineral density and muscle following hip fracture; 2) summarize results of a study evaluating excess mortality after hip fracture; and 3) discuss the need to identify strategies for examining excess morbidity following hip fracture. Data for this presentation will come from three cohorts of patients in the Baltimore Hip Studies, which has enrolled and followed over 2000 hip fracture patients admitted to 8 Baltimore hospitals since 1983. The presentation will highlight the limitation of this and other cohort studies in estimating the excess mortality and morbidity attributable to acute debilitating events, and will describe the strategy being taken to address this limitation using hip fracture as an example. This presentation will describe how the Baltimore Hip Studies cohorts will be compared to samples from national and other datasets (e.g., EPESE, LSOA, SOF) to evaluate the excess mortality and morbidity following hip fracture.

FUNCTIONAL DECLINE FOLLOWING HIP FRACTURE: COMPARISON OF A COHORT OF HIP FRACTURE PATIENTS WITH EPESE PARTICIPANTS.

L. Fredman, Dept. Epidemiology & Preventive Medicine, School of Medicine, U. Maryland, Baltimore, MD 21201.

Elderly persons who have fractured a hip have a higher risk of functional limitations at followup than their counterparts, yet little is known about the specific areas or patterns of decline in activities of daily living (ADLs) following hip fracture. In this presentation, we will describe a study that merges a subsample of the EPESE cohort with a cohort of 804 hip fracture patients to compare decline in ADLs over a two-year period. The EPESE dataset provided prospective data on a large comparison group of community-dwelling elderly persons that could not have been collected by an independent investigator. However, the two datasets differed in sample characteristics, responses to ADL questions, and length of followup. This presentation will cover methodologic considerations in designing this study (e.g., identification of a control group from the EPESE dataset, based on the distribution of age, sex, and baseline comorbidities; making the ADL questions comparable between the datasets; selecting a specific set of ADLs; and statistical modeling of decline), and address how this model may be replicated with other measures of functional decline.

GENERALIZABILITY OF HIP FRACTURE STUDIES: ASSESSING THE REPRESENTATIVENESS OF STUDY SAMPLES THROUGH PUBLIC USE DATASETS. J.A. Grisso, Center for Clinical Epidemiology and Biostatistics, Dept. General Internal Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA 19104.

The nature of hip fracture raises methodological challenges to conducting epidemiologic studies of risk factors and outcomes of hip fracture. This presentation will use examples from the Northeast Hip Fracture Study Group and the Hip Fracture Study Group. Briefly, the relatively low incidence of hip fractures in community-dwelling elders makes it impractical to conduct cohort studies to identify risk factors prior to the fracture (exceptions are multi-site studies such as the Study of Osteoporotic Fractures). Most hip fractures result in hospitalization; studies may compare patients hospitalized for hip fracture versus hospital- or community-control groups. However, these studies may be limited in recall of pre-fracture status, reliance on proxy informants more for hip fracture patients than other respondents, and high mortality in hip fracture patients. To determine whether a sample in one case-control study of hip fracture was representative of the elderly community-based population, we compared selected demographic and health characteristics of 425 women hip fracture patients, 312 hospital controls, and 454 community controls identified through HCFA datasets, to women in two EPESE sites. The discussion will address the benefits of comparing case-control samples in hip fracture studies to public use samples, the rationale for choosing the EPESE sample, methods for selecting controls, variables, and analyses, and suggestions for adapting this strategy to other public use datasets and other health conditions in elderly adults.

MAKING THE MOST OF MULTI-SOURCE DATA SETS THAT INCLUDE BASELINE AND FOLLOW-UP INTERVIEWS LINKED WITH MEDICARE CLAIMS AND MORTALITY DATA. F. D. Wolinsky, School of Public Health,Saint Louis University, 3663 Lindell Blvd., St. Louis, MO 63108.

Some public-use studies, like the Longitudinal Study on Aging (LSOA), provide data linked from several sources including baseline and follow-up interviews, abstracts of Medicare claims, and decedent status from the National Death Index. Other ongoing studies, like the Survey on Assets and Health Dynamics, plan on multiple data linkages. These multi-source data sets provide the opportunity to model cause-specific hospitalizations, which may be used as proxies to identify well-defined, common, morbid conditions. Studies like the LSOA can be viewed as prospective epidemiologic cohorts appropriate for analyses that focus on the risk of common morbid conditions that require hospitalization, the recurrence of those conditions, and the effect of those conditions on subsequent morbidity, health services use, and mortality. We have used this approach to investigate hip fracture, pneumonia, depression, congestive heart failure, ischemic stroke, acute myocardial infarction, breast cancer, diabetes, and prostate disease in the LSOA. This presentation will provide an overview of the difficulties involved in these analyses, including case-identification, selection of appropriate control groups and creation of their simulated index dates, distinguishing between re-hospitalization and recurrent hospitalization, potential coverage bias for veterans or older adults in health maintenance organizations, and the implicit iceberg continuum of how fully such cause-specific hospitalizations capture the underlying condition.

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DISABILITY PREVENTION FOR OLDER PERSONS: IN-HOME MUTLIDIMENSIONAL INTERVENTION PROGRAMS

A.E. Stuck, Geriatrics Research Unit, Department of Geriatrics and Rehabilitation, Zieglerspital, Morillonstr. 75, CH-3001 Bern, Switzerland.

Participants:

J.C. Beck, (School of Medicine, UCLA, Los Angeles, CA-90024) A meta-analysis of randomized trials.

C.J. Bula, (Division of Geriatrics, CHUV, 1001 Lausanne, Switzerland) Targeting for preventive in-home assessment

A.E. Stuck (Geriatrics, Zieglerspital, CH-3001 Bern) Final results of a new trial: intervention process and cost effectiveness.

J. Walthert (Geriatrics, Zieglerspital, CH-3001 Bern) & T. Nikolaus (Bethesda Geriatrics Center, D-89073 Ulm, Germany) Risk factors for functional status decline: A systematic review.

Discussants:

L.Z. Rubenstein (Multicampus Program for Geriatrics and Gerontology, UCLA, Los Angeles, CA-90024-1687).

L. Fried (Dep. of Medicine and Epidemiology, Baltimore, MD-21205).

In-home preventive geriatric assessment is a promising strategy for preventing disability in older persons. Symposium presents findings of a collaborative research project of Swiss, German, and U.S. centers for the development of community-based models of in-home preventive visits for older persons.

(1) A just completed meta-analysis of the effects of randomized trials of in-home preventive visits shows favorable effects on mortality, nursing home admissions, functional status and other outcomes. Meta-regression analyses of the randomized controlled trials identify intervention process factors associated with favorable effects (method of initial evaluation, intensity of intervention, length of follow-up).

(2) The results of a recently completed randomized trial of in-home geriatric assessments (EIGER project) conducted in Bern Switzerland, with favorable outcomes on functional status and nursing home admissions, show that the quality of the intervention personnel is an additional important variable determining program effects.

(3) It has been proposed that preventive home visits should be offered to selected persons only. The results of a secondary analysis of an earlier randomized controlled study demonstrate that well-functioning elderly subjects benefit from preventive home visitation programs.

(4) In order to improve intervention designs, better methods of in-home multidimensional geriatric assessments are needed. This will be discussed based on a recent systematic literature review of risk factors for disability in older persons.

Opportunities for continued research, new program development, and practice implementation of in-home multidimensional programs will be discussed

EFFECTS OF PREVENTIVE HOME VISIT PROGRAMS IN OLDER PERSONS: A META-ANALYSIS

J.C. Beck, C.E. Minder, M. Egger, J. Walthert, A.E. Stuck
UCLA School of Medicine, Los Angeles, CA; Dep. of Geriatrics, Zieglerspital, Bern, Switzerland; Dep. of Social and Preventive Medicine, Univsersity of Bern, Switzerland; Department of Social Medicine, University of Bristol, U.K.

Randomized controlled trials of preventive home visits in older people have reported variable results. We recently completed an updated meta-analysis of randomized trials of preventive home visits in community-dwelling older people.

Among 870 articles, we found 13 randomized trials meeting a priori inclusionary criteria. Combined analyses showed favorable results for mortality, nursing home admissions, and functional status outcomes. Statistical calculation of combined effect estimates for all trials combined was not appropriate due to significant heterogeneity of intervention designs and outcomes between the 13 studies.

A meta-regression analysis revealed that three intervention design components were significantly associated with favorable outcomes: (1) The use of multidimensional geriatric assessment as a method for initial evaluation of older persons; (2) giving recommendations to older persons as part of the intervention program; and (3) extended follow-up of the intervention with subsequent follow-up home visits. Intervention programs including these intervention design components had more favorable effects as compared to intervention programs that did not include these components. The implications of these findings for further research, new program development, and practice implementation will be discussed.

TARGETING COMMUNITY DWELLING ELDERLY FOR PREVENTIVE IN-HOME COMPREHENSIVE GERIATRIC ASSESSMENT:DO WELL-FUNCTIONING SUBJECTS BENEFIT ?

CJ Bula, MD*; A Clerc Berod, PhD; AE Stuck, MD; CA Alessi, MD; HU Aronow, PhD; B Santos-Eggimann, MD; LZ Rubenstein, MD; JC Beck,MD
UCLA Multicampus Program of Geriatric Medicine and Gerontology, Los Angeles,CA 90024 & Geriatric Division, CHUV, 1011 Lausanne & Institute of Social and Preventive Medicine, Faculty of Medicine, 1011 Lausanne, Switzerland

We undertook an analysis to evaluate whether annual preventive in-home comprehensive geriatric assessments (CGA) with follow-up visits prevent dependency in basic ADL (BADL) in a subgroup of community dwelling elderly persons independent in BADL at baseline.

From the original population (n=414) of community living elderly persons aged 75 years and over who participated in a trial testing the effectiveness of annual in-home CGA, we excluded subjects (n=27) who were dependent in one or more BADL before randomization (final sample size n=387). We compared the number of days spent by intervention and control group subjects at 4 different functional states: 1) independent in both BADL and instrumental ADL (IADL), 2) independent in BADL but dependent in IADL, 3) dependent in both BADL and IADL, 4) dead. Comparisons were made for each year separately and for the entire study period.

There was no difference in survival between intervention and control group subjects. In bivariate analysis, intervention group subjects spent significantly fewer days dependent in both BADL and IADL, during each year of the study (5 vs 14 days, $p=.02$, 13 vs 33 days, $p=.02$ and 19 vs 44 days, $p=.01$ for year 1, 2 and 3 respectively) and over all 3 years combined (36 vs 92 days, $p=.02$). In multivariate analyses, intervention significantly reduced time spent in complete (BADL & IADL) dependency, and tended to increase time spent in partial (IADL only) dependency, and complete independence.

Preventive annual in-home CGA improved functional evolution by reducing time spent in complete dependency, and by increasing time spent in partial and complete independence in this subgroup of elderly persons without BADL impairment at baseline. These well-functioning subjects should therefore not be excluded from similar programs.

PREVENTION OF DISABILITY: A RANDOMIZED TRIAL OF ANNUAL MULTIDIMENSIONAL ASSESSMENTS IN COMMUNITY-DWELLING OLDER PEOPLE.

A.E. Stuck, C.E. Minder, J.C. Beck. Department of Geriatrics, Zieglerspital, CH 3001 Bern, Switzerland; Department of Public Health, University of Bern; and Multicampus Program in Geriatric Medicine and Gerontology, UCLA, Los Angeles.

Intervention trials have shown that in-home preventive geriatric assessments can delay the onset of disability in older people. We present final results of a new trial (N=791) conducted to explore the link between intervention process and outcomes. In three geographical sectors (A, B, and C) in Bern, over 75-year-old community dwelling persons were separately randomized to intervention and control groups. In each sector, one nurse conducted annual in-home assessments and three-monthly interim follow-up visits in intervention group subjects. First year data revealed that nurses A and B discovered significantly more problems and gave more recommendations to older persons as compared to nurse C.

At two years, intervention subjects in sectors A and B were more likely to be independent in activities of daily living as compared to controls (OR 2.2; 95% CI 1.1-4.8, P=0.03). In sector C, there was no such effect (OR 1.1; 95% CI 0.5-2.2). Similarly, in sectors A and B, but not in sector C, there was an improvement of gait and balance measures and a reduction of nursing home admissions. The differences in intervention effects between the sectors were statistically significant (P<0.01) and could not be explained by differences in the populations. These findings strongly suggest that a high level of professional competence is required for favorable outcomes of preventive home visits, and may help explain the equivocal results reported in the past on the benefits of comprehensive geriatric assessment.

RISK FACTORS FOR FUNCTIONAL STATUS DECLINE IN COMMUNITY-LIVING OLDER PERSONS: A SYSTEMATIC REVIEW OF THE LITERATURE

J. Walthert, A.E. Stuck, T. Nikolaus, C.J. Bula, C. Hohmann, J.C. Beck. Dep. of Geriatrics, Zieglerspital, CH 3001 Bern; University of Lausanne, Switzerland; Universty of Ulm, Germany; and UCLA School of Medicine, Los Angeles.

Better knowledge about risk factors for functional status decline is necessary to develop more cost-effective intervention programs for preventing disability in older persons. Among 1283 screened publications, we found 78 longitudinal studies with information about the statistical association between baseline individual risk factors and functional status outcome in community-living older persons.

The strength of evidence of the association between risk factors and functional outcomes was rated for 14 risk factor domains. The strongest evidence for an increased risk in decline of functional status was found for cognitive impairment, depression, disease burden, high or low body mass index, lack of social contacts, lower extremity functional limitation, low level of physical activity, no versus moderate alcohol use, poor self-perceived health, smoking, and vision impairment. The review revealed that some risk factors (e.g. nutrition, physical environment, social support) have been neglected in research to date. A main difficulty for synthesizing study results was the high variability in operational definitions of functional status.

There is strong evidence that biological, psycho-social, and functional risk factors are associated with an increased risk of subsequent disability. This review can be used for developing improved programs for preventing disability, and it identifies priorities for future research of the Disablement Process.

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GERIATRIC RESEARCH EDUCATION AND CLINICAL CENTER (GRECC) SYMPOSIUM II: FROM BENCH TO BEDSIDE - ADVANCES IN IMMUNITY AND INFECTIOUS DISEASES. B. Bender, Gainesville VAMC GRECC, Gainesville, FL.

Participants:

R.A.Miller (Ann Arbor VAMC GRECC, Ann Arbor, MI) Survival and Immunity in Mice Treated Daily with DHEA Throughout Life.

J. Maruenda (Gainesville VAMC GRECC, Gainesville, FL) Response to Protease Inhibitors in Older Patients.

L. Volicer (Bedford VAMC GRECC, Bedford, MA) Limited Effectiveness of Antibiotic Therapy in Advanced Dementia.

E.C. Bender (Gainesville VAMC GRECC, Gainesville, FL) Intake of Antioxidants Among American Physicians.

Alterations in immune response and the susceptibility to infection is heightened in the elderly. The administration of dehydroepiandrosterone sulfate (DHEA-S) given to mice has been suggested to lead to the prevention of age-related decline in immune responsiveness. Recent studies with DHEA-S show no positive effect on the immune system or on survival. DHEA metabolism in rodents differs from that in humans making it difficult conclude about human effects. Eleven percent of all the cases of AIDS reported in the United States has occurred in persons 50 years of age or older. Retrospective review of 14 patients, mean age 56.8 years (50 to 73 years) with HIV infection show a significant reduction in viral load and increase in CD4+ T-cell counts in older patients with HIV infection treated with protease inhibitor. These changes were similar to those recorded in younger adults. Infections are quite common in patients suffering from advanced dementia as a result of changes in immunological function, decreased mobility, incontinence and swallowing difficulties. Studies show that the use of antibiotics in advanced dementia has very limited benefit and it has been suggested that a palliative treatment strategy be recommended to the proxy decision-maker when advanced directives are considered. The consumption of antioxidants has recently been surveyed in a population of physicians. Of the sample of 88 physicians surveyed, 33% took antioxidants and 50% prescribed them. Factors that influenced whether physicians prescribed antioxidants were fellowship training or certification in geriatrics. Data demonstrated that geriatricians prescribed antioxidants more than they themselves ingested.

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INTERNATIONAL RESEARCH ON NUTRITIONAL SCREENING: THE MINI-NUTRITIONAL ASSESSMENT (MNA). L.Z. Rubenstein & B. Vellas. UCLA-Sepulveda VA Medical Ctr. GRECC 16111 Plummer St., Sepulveda, CA 91343.

Participants:

B. Vellas, Y. Guigoz, F. Nourhashémi, S. Lauque (Service de Médicine Interne et Gérontologie Clinique, Hôpitaux de Toulouse, France). The MNA: Research and Practice.

A. Salvà, I. Bolivar, M. Bleda, M. Muñoz, V. Sacristán, R. Parés (Centre Geriàtric Cabanellas / IREC, PASS. Mataró, Spain). Behavior of the MNA in Three Elderly Populations.

L.Z. Rubenstein, J. Harker, B. Vellas, Y. Guigoz, A. Salvà (UCLA-VA Medical Ctr., GRECC, Sepulveda, CA 91343). Validating a Short Version of the MNA: The MNA-SF.

G. Cappa, M.Massaia, E. Ferrario, A. Pallavicino di Ceva, M. Molaschi, F. Fabris (Dept. of Medical & Surgical Disciplines, Geriatric Section, Univ. of Torino, Torino, Italy). MNA-SF in Nursing Home Residents: Correlations with MNA.

D.K. Miller, B. Vellas, Y. Guigoz, L.Z. Rubenstein, J.E. Morley (St. Louis Univ., St. Louis, MO). Ability of Four Nutritional Risk Instruments to Predict Weight Loss in Seniors.

The Mini-Nutritional Assessment (MNA) was designed to provide a rapid assessment of nutritional status in elderly patients in multiple settings. Its simple measurements and brief questions can be completed in about 10 min. It has been translated into several languages and validated in many settings around the world. Elderly patients can be grouped into three categories based on the total MNA score: 1) adequate nutritional status (MNA ≥ 24), 2) "at risk" of malnutrition (MNA 17 to 23.5) and 3) protein-calorie malnutrition (MNA < 17). This symposium will present data from four countries on the development and validity of the MNA, on its correlation with other nutritional scales, and on recent efforts to streamline the MNA by developing a valid 2-minute MNA short form (MNA-SF). Usefulness of nutritional screening and outcome studies in progress will be discussed.

THE MINI-NUTRITIONAL ASSESSMENT (MNA): RESEARCH AND PRACTICE.

B. Vellas, Y. Guigoz, F. Nourhashémi, S. Lauque. Service de Médicine Interne et Gérontologie Clinique, Hôpitaux de Toulouse, France.

The MNA has been designed to provide a single, rapid assessment of nutritional status in elderly patients in outpatient clinics, hospitals, and nursing homes. It has been translated into several languages and validated in clinics around the world. The simple measurements and brief

questions of the MNA can be completed in about 10 minutes. Discriminant analysis was used to compare findings of the MNA with nutritional status determined by physicians using standard nutritional assessment with complete anthropometric, clinical biochemistry, and dietary parameters.

The total MNA score distinguishes three categories of elderly patients: 1) adequate nutrition: MNA ≥ 24, 2) at risk of malnutrition: MNA between 17 and 23.5, 3) Protein calorie malnutrition: MNA < 17. With this scoring, sensitivity was found to be 96%, specificity 98% and predictive value 97%. The MNA was also found to be predictive of mortality and hospital cost. Most important, it is possible to identify people at risk for malnutrition before severe changes in weight or albumin levels occur. These individuals are more likely to have a decrease in calorie intake that can be easily corrected by nutritional intervention.

BEHAVIOR OF THE "MINI NUTRITIONAL ASSESSMENT" IN THREE ELDERLY POPULATIONS

A. Salvà, I. Bolívar, M. Bleda, M. Muñoz, V. Sacristán, R. Parés. Centre Geriàtric Cabanellas / IREC, PASS. Mataró, SPAIN

Frail elderly people are at special risk of undernutrition. The Mini-Nutritional Assessment (MNA) allows us to identify persons who are undernourished or at risk of undernutrition. We present differences found when we applied the MNA to three different elderly populations: 1) 114 persons admitted to a convalescent unit (62F & 52M, mean ages 78.5 and 77.1), 2) 89 persons admitted to a nursing home (NH) (69F & 18M, mean ages 83.3 and 78.8), and 3) 199 independent persons living in the community (114F & 85M, mean ages 72.9 & 71.4). The MNA results were stratified into 3 categories (under-nutrition / at risk / satisfactory). We analyzed the influence of age and sex on the scores and association with anthropometric nutritional markers (weight loss & BMI).

The percentage of persons classified as undernourished was 33.3%, 5.7% & 0.5% in the convalescence, NH, and community-based groups, respectively; persons "at-risk" were 54.4%, 47.1% & 9.1%; and persons with satisfactory nutritional status were 12.3%, 47.1% & 89.9% respectively. MNA score was significantly associated with both weight loss and BMI. In each group all areas of the MNA were highly correlated with total score (coefficients from 0.43 to 0.79); the magnitude of the correlation was higher in the convalescent population. The MNA appears to be a quick and accurate tool for identifying nutritional problems in multiple geriatric populations.

VALIDATING A SHORT VERSION OF THE MINI-NUTRITIONAL ASSESSMENT (MNA): THE MNA-SF.

L.Z. Rubenstein, J.Harker, B. Vellas, Y. Guigoz, A. Salva. UCLA-VA Medical Ctr. GRECC, Sepulveda, CA 91343.

The MNA is a validated screening instrument for nutritional problems, but its length limits its usefulness in many settings. We sought to develop a shorter, simple MNA that retains good predictive accuracy. We reanalyzed 1991 data from Toulouse, France used to develop the original MNA (Vellas et al., 1991) and combined these data with additional data collected in Mataró, Spain and Albuquerque, NM. 902 subjects were included, of whom 881 had complete MNA data. 151 were from France, 400 from Spain and 330 from NM. 73.8% were community dwelling, 26.2% were in nursing homes or convalescent hospitals. Mean age was 76.4 (SD 7.9 yrs.), range 50-98. Clinical nutritional status was evaluated for 141 of the Ss from France. Items were chosen for inclusion in the MNA-SF based on their correlation with the overall MNA total score, ease of data collection, reliability and completeness of data, and internal consistency (coefficient Alpha). Cutpoints for MNA-SF normal vs. at risk groups were initially determined using clinical nutritional status (n=143) as 'gold standard' for the ROC curve, and were also calculated based on total MNA score (n=881). *Results*: The MNA-SF was highly correlated with the total MNA (r=.945). Using a cutpoint of ≤ 10 on MNA-SF as 'at risk', sensitivity was 84.9%, specificity = 93.5% and diagnostic accuracy 90.4% relative to the full MNA. Separate ROC curves for institutionalized and community dwelling elderly suggest that different cutpoints may be appropriate for these groups.

MINI-NUTRITIONAL ASSESSMENT SHORT FORM (MNA-SF) IN NURSING HOME (NH) RESIDENTS: CORRELATIONS WITH MNA.

G. Cappa, M. Massaia, E. Ferrario, A Pallavicine di Ceva, M Molaschi, F. Fabris. Geriatric Section. Univ. of Torino, Corso Bramante 88, 10126. Torino Italy.

The aim of the study was to evaluate correlations between the MNA-SF and full MNA as well as with primary nutritional and functional parameters. We studied 100 frail NH residents, 24 men, 76 women with mean age 85.4 ± 9.2 yrs. and mean nursing home length of stay 5.3 yrs. Mean score on the Short Portable Mental Status Questionnaire (SPMSQ) was 6.7 ± 2.9 and in terms of activities of daily living (ADL), there were 4.7 ± 1.5 lost functions. 55% had serum albumin < 3.7. The full MNA (18 items) showed a significant correlation with the MNA-SF (r = .915, p< .001). Moreover, the Malnutrition Indicator Score, which establishes nutrition risk categories for the MNA, correlates similarly with the MNA-SF score and full MNA score (r = -.696 vs. -.657). The MNA-SF correlates (P < .001) with all of the following nutritional and functional parameters: weight (r=.46), BMI (.50), mid-arm circumference (.44), calf circum-ference (.57), ADL (-.53), SPMSQ (-.45), albumin (.36) and tranferin (.36). On the basis of our results, we propose the use of the MNA-SF in the comprehensive geriatric assessment.

ABILITY OF FOUR NUTRITIONAL RISK INSTRUMENTS TO PREDICT WEIGHT LOSS IN SENIORS.

D.K. Miller, B.J. Vellas, Y. Guigoz, L.Z. Rubenstein, J.E. Morley, St. Louis University, St. Louis, MO, 63104.

We compared the ability of four instruments designed to measure nutritional risk in older persons to predict future weight loss. *Methods:* 80 community-dwelling African - Americans (50 F, 30 M), aged 78.6 (SD 5.6) years at baseline (range 71-91) were followed 20.4 (SD 8.9) months. Significant weight loss was defined as a decrease of >4% of baseline body weight (JAGS 95;43:329) from first to last weighing. The 4 nutritional instruments were measured at baseline and included: a slightly modified version of Vellas et al.'s Mini-Nutritional Assessment (MNA, Facts Res Gerontol 94 (S2):15); Rubenstein et al's MNA short form

(MNA-SF); Morley's SCALES (JAGS 91;39:1139); and Wolinsky et al.'s Nutritional Risk Index (NRI, J Nutr 90;120:1549). Statistical analysis involved normalized versions of the nutritional measures (coded so that an increasing score indicated increasing risk) and logistic regression. *Results:* 21/80 subjects lost weight over F/U. ORs (P, ROC area) for weight loss with a 1-SD increase in the nutritional measure were: MNA 1.99 (.056, .681); SMNA 2.6 (.018, .682); SCALES 1.08 (.818, .528); NSI 1.49 (.262, .590). Women were more likely to lose weight than men (34% vs 13%, P=.042). When gender was controlled, ORs and model ROC areas increased: MNA 2.51 (.032, .795); SMNA 3.08 (.010, .746); SCALES 1.17 (.641, .627); NSI 1.83 (1.31, .752).

***Conclusion:* The MNA and MNA-SF were best able to predict weight loss in older persons over a 20 mo. F/U, with little difference between them.**

Supported by Grant 5 RO1 AG10436 (NIA).

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ANNUAL COSTS FOR A HOME BOUND LONG-TERM CARE PRIMARY PRACTICE B. Kinosian, J. Cocchmani, R. Torello, M. Forciea, J. Yudin, R. Lavizzo-Mourey, Institute on Aging, University of Pennsylvania, Philadelphia PA 19104 **Objective**: 1) Determine the total annual cost for community based long-term care for a cohort of home-bound elders receiving home care (In-Home Primary Care Program {IHPCP}); 2) Determine the in-hospital cost difference between IHPCP patients and similar community-residing patients receiving usual care.

Setting: Two physician-2 nurse practitioner collaborative practice with a case-load of 160 home-bound, nursing-home elegible patients receiving community services from the Philadelphia Corporation on Aging (local area agency on aging), home health agencies, and the UP Health System.

Population: 1995 inception cohort augmented by new 1996 patients, followed for 1996 resource use.

Methods: Cohort study, with nested case-control sub-study. Hospital costs were from a hospital microcosting system; PCA costs were actual service plan expenditures, nursing home costs were projected from the monthly nursing home placement and Medicaid rate.

Results: Total patients served were 243; there were 63deaths (31% annual mortality rate). Annual nursing home placement rate was 9%/year. Hospitalizations were .029/patient-month, or .35/year. Mean length of stay was 5.9 ± 4.7 days, with annual hospital bed-days of 2407/1000patients. Total monthly costs were: $113 for MD-NP program, $320 for home health agency services, $510 for hospital services, $245 for nursing home, and $851 for PCA-funded services, for total monthly costs of $2,039. As a benchmark, PACE-program caps are $2,800/month. IHCP patients had per-hospitaliza- tion costs $2800 less than control patients, but marginal costs $590 less than controls, indicating savings were due to less extensive, not less intensive care.

Conclusions: Primary home-based care can provide primary, secondary and long term care for a frail group of elders at or below the PACE benchmark.

CASE MANAGEMENT INCREASES QUALITY OF CARE AND DECREASES COSTS IN A HOME CARE PROGRAM

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Catholic University of Sacred Heart, Rome, Italy

Case management in frail and disabled elderly produced contrasting results in previous studies. We decided to conduct a randomized clinical trial in order to evaluate the impact of case management on a home care program where 200 older people were already receiving conventional community care services. The intervention group during the year of follow-up had improved physical function (ADL score improved by 5.1% compared to a 13% loss in controls; p<0.001) while decline of cognitive status was reduced (3.8% compared to 9.4% in controls; p<0.05). Survival analysis showed that the intervention group was admitted to either hospital or nursing home later and less often than controls (hazard ratio=0.69, 95% CI 0.53-0.91). Health services were used to the same extent but control subjects received more visits by primary physician. In the intervention group the estimated cost savings were in order of $1800 per year of follow-up.

Case management provides a cost-effective approach to reduce institutionalization and functional decline in older people living in the community.

HOME HOSPITAL PROGRAM: SAFETY AND FEASIBILITY DEMONSTRATION. B. Leff, MD, L. Burton, ScD, S. Guido, RN, W.B. Greenough, MD, D. Steinwachs, PhD, J.R. Burton, MD Johns Hopkins Bayview Medical Center Johns Hopkins University School of Hygiene and Public Health Baltimore, MD 21224 **BACKGROUND** Home Hospital (HH) is an increasingly feasible care option and may be preferrable for certain older patients **OBJECTIVE** Demonstrate basic safety and feasibility of a HH **METHODS** HH is a brief, illness-focused intervention designed to treat older persons at home for specific medical illnesses that require hospital level intervention, by bringing critical elements of hospital care to the home including physician visits, nursing supervision, intravenous fluids and medicines, durable medical equipment, diagnostic, laboratory, and pharmacy support Target diagnoses for HH treatment are community-acquired pneumonia, congestive heart failure, chronic obstructive airway disease, and cellulitis **RESULTS** Between October 1996 and February 1998, 17 patients were enrolled in the HH Compared with patients who were eligible for HH but treated in the acute hospital , HH patients had favorable clinical outcomes, higher levels of satisfaction with care (0.9 v 0.65, $p < 0.01$), and lower mean hospital charges (64% of charges of those treated in the acute hospital, ($1948 v $ 3021, $p < 0.001$))

CONCLUSION HH is a safe and feasible care model for treating selected older persons with certain medical illness requiring hospital level care A larger multisite controlled demonstration of HH is being planned

MEDICAL STUDENTS PERSPECTIVES ON HOME CARE. P. Katz, & J. Karuza, University of Rochester, Rochester, NY 14620.

The study is part of the Hartford Foundation sponsored initiative "Expansion of Home Care into Academic Medicine". All third year (responding n = 75) medical students were given a survey on their perceptions of the relevance of home care to primary care practice and their acceptance of home visits before being exposed to a curriculum on the practice of home care. A majority (59%) felt that home visits served a critical role in management of older adult patients. On average, students thought that 30% of older adults require home visits. When asked to identify factors that prompt a physician home visit to an older adult, students rated the following as "quite a bit" or "very important": loss of physical function (53%), social isolation (47%), hospice care (46%), patient safety issues (45%), and caregiver stress (40%). Factors that were rated as less important were: treatment follow-up routine management, acute medical problems, depression, and discussion of advanced medical directives. A majority students felt that home visits had a significant impact on: quality of patient-physician relationship (72%), preventing hospitalization (62%), health promotion (62%), prevention of health problems (58%), enhancing quality of life (55%), empowering patients (54%), patient compliance (53%), implementing treatment plans (51%). A majority of students identified the following as serious barriers to providing routine home visits in primary care practice: physician schedule, reimbursement, distance to travel. The data suggest that students have some idea of the benefits associated with home visits and are open to learning them. Areas for emphasis include: recognition of the importance of home care in treatment follow up, and training in the logistics involved in planning efficient home visits as a way of overcoming perceived barriers.

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EXPLORING LATE-LIFE SEQUELAE OF TRAUMA THROUGHOUT THE LIFE COURSE. Boaz Kahana, Cleveland State University, Department of Psychology, Euclid Ave. at East 24th St. Cleveland, OH 44115.

Participants

B. Kahana, K. Kercher, & J. Brown: Early life crises and psychological well-being in late life.

E. Kahana, B. Kahana, & Z. Harel: Survivors of the Nazi Holocaust face old age.

A. Justice: From a death sentence to the challenge of living: The medical transformation of the AIDS experience.

G. Deimling, B. Kahana, & K. Abbott: Traumatic Stress and Cancer Survivorship in Later Life.

Discussant:

L. Pearlin, University of Maryland, College Park, MD. 20742-1315.

In addition to normative stressors of aging, many older adults confront issues presented by life crises and traumatic events experienced at different periods throughout their lives. This symposium addresses threats posed by early, midlife, and late life trauma for coping and for physical health and mental health of older adults. Post Traumatic Stress Disorder, sleep and memory disturbances, identity issues, and other trauma related physical health and mental health problems will be discussed. Panelists will present conceptual frameworks and data, based on a broad spectrum of traumatic events and from vantage points of different disciplines (including sociology, psychology and medicine).

One paper will address sequelae of torture and of war-related trauma as survivors of the Nazi Holocaust, who are living now in different societies, confront their own aging. A second paper considers the prevalence and late-life sequelae of traumatic life experiences, such as early bereavement, combat experience, sexual abuse, and natural disasters, in samples of elderly urban dwellers and retirement community residents. The third paper focuses on the impact of advances in medical care on the challenges of living, rather than dying, with AIDS among older adults. A final paper explores self concepts of older adults who had experienced cancer or other life-threatening illnesses at different points during the life cycle.

The discussant will explore theoretical perspectives of general and traumatic stress research as they can inform our understandings of aging and life course development in a social context.

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MODELING QUALITY OF LIFE IN COMMUNITY-RESIDING INDIVIDUALS WITH ALZHEIMER'S DISEASE.
R.G. Logsdon, University of Washington, Box 356560, Seattle, WA 98185-6560.

Participants:

L.E. Gibbons, R.G. Logsdon, S.M. McCurry, L. Teri (University of Washington, Seattle, WA) Study Description: Characteristics of Community Residing AD Participants and Caregivers.

L. Teri, R.G. Logsdon, S.M. McCurry, L.E. Gibbons (University of Washington, Seattle, WA) Components of Psychological Health Of Individuals with AD and Their Caregivers.

S.M. McCurry, R.G. Logsdon, L.E. Gibbons, L. Teri (University of Washington, Seattle, WA) Sleep and Related Characteristics of Individuals with AD and Their Caregivers.

R.G. Logsdon, L. Teri, L.E. Gibbons, & S.M. McCurry (University of Washington, Seattle, WA) What is Quality of Life in AD? Empirical Evaluation of Hypothesized Components.

Discussant:

P.J. Whitehouse (Case Western Reserve University, Alzheimer Center at Fairhill Center for Aging, Cleveland, OH 44120)

Quality of life (QOL) in Alzheimer's disease (AD) has recently come to the forefront of attention, due largely to increasing demands that newly developed treatments for AD provide evidence that they benefit individuals with AD in some way that noticeably improves their lives. However, there is little agreement about how best to evaluate QOL in these individuals. This symposium provides an overview of a model of QOL being tested in a community residing, population based sample of individuals with AD (current n=117 participant-caregiver dyads). The original theoretical model was based on a symbolic interaction/ transactional framework, in which physical, interpersonal, environmental, and psychological factors contribute to the individual's overall life quality. These factors are each filtered through the individual's own perceptions and expectations (as well as those of the caregiver) to arrive at a subjective quality of life rating. Each presenter in the symposium focuses on a different aspect of QOL in this sample, including participant and caregiver psychological status, sleep and behavioral characteristics, and subjective ratings of quality of life. Data presented by each presenter are incorporated into subsequent presentations, with the goal of providing an overview of the complexity of this topic and building an empirically based model of QOL in AD.

(Research supported by the Alzheimer's Association and National Institute of Aging. Symposium sponsored by CHORD, a working group of the NIA Alzheimer's Disease Centers.

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SUBJECTIVE EVALUATIONS OF QUALITY OF LIFE AND HEALTH AS PREDICTORS OF MORTALITY: TIME FRAME AND MECHANISMS.

J. Smith & H. Maier, Max Planck Institute for Human Development, Lentzeallee 94, 14195 Berlin, Germany.

Participants:

A. Spiro III, C.M. Aldwin, M.R. Levenson (Normative Aging Study, VA Outpatient Clinic, Bedford MA 01730) Psychosocial factors and mortality: Prospective findings from the VA Normative Aging Study.

H.B. Bosworth, I.C. Siegler, B.H. Brummett, J.C. Barefoot, R. Williams, N. Clapp-Channing, B.L. Lytle, D. Mark (HSR&D, Durham VAMC, Durham NC 27705) Self-rated health as a predictor of mortality in a sample of coronary artery disease patients.

H. Maier, J. Smith (Max Planck Institute for Human Development, 14195 Berlin, Germany) M. Borchelt (Forschungsgruppe Geriatrie am EGZB, 13347 Berlin, Germany) Self-evaluations and mortality: The importance of self-rated functional status.

D.J.H. Deeg, R.J. Bosscher, B.W.J.H. Penninx (Departments of Psychiatry and Human Movement Science, and Institute for Research in Extramural Medicine, Vrije Universiteit, 1081 HV Amsterdam, The Netherlands) Physical ability vs. physical self-efficacy as predictors of mortality.

N.L. Pedersen (Division of Genetic Epidemiology, Institute of Environmental Medicine, The Karolinska Institute, S-171 77 Stockholm, Sweden) Self-rated health, gender differences, and longevity: Why do women live longer, but report poorer health?

Discussant:

K. Christensen (Odense University Medical School, 5000 Odense C., Denmark)

Unfavorable subjective evaluations of quality of life and health (e.g., low self-rated health, low self-rated functional status, dissatisfaction with health and life) have been implicated as risk factors for mortality. Goal of the symposium is to review recent longitudinal research on the link between subjective evaluations and mortality, and to explore the time frame and possible explanatory mechanisms. Some speakers will compare the different predictive weights of alternative subjective evaluations of quality of life and health. Other speakers will examine whether associations between subjective evaluations and mortality persist when objective measures (e.g., performance tests, physician-assessed health status) are taken into account. Genetic and environmental effects on the relationship between subjective evaluations and longevity will also be considered.

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COGNITIVE ABILITIES AND COGNITIVE FUNCTION IN A DIVERSE POPULATION: PILOT FINDINGS FROM THE ACTIVE STUDY.

S. Tennstedt, New England Research Institutes, Watertown, MA 02172, and J.B. Jobe, National Institute on Aging, Bethesda, MD 20892.

Participants:

S.L. Willis (Penn State University), D. Smith (Indiana University) Relationship of Psychometric Ability and Cognitive Function.

K. Ball, C. Owsley, R. Myers, K. Goode (University of Alabama at Birmingham) Cognitive Correlates of Mobility Restriction in Later Life.

M. Marsiske, J.C. Allaire (Wayne State University) Everyday Task Performance: Contributions of Cognitive and Sensorimotor Variance.

J.J. Gallo, G.W. Rebok (Johns Hopkins University)

S. Tennstedt (New England Research Institutes) Linking Depression to Cognitive Function in Late Life.

R.N. Jones, A. Rosenberg, J.N. Morris (Hebrew Rehabilitation Center for the Aged, Boston, MA)

F. Unverzagt (Indiana University) Change in Cognitive and Instrumental Competence Over Time.

Discussant:

P. Baltes (Max Planck Institute for Human Development, Berlin Germany)

ACTIVE is a randomized controlled trial, funded by the National Institute on Aging and the National Institute for Nursing Research, to test the effect of cognitive training on improving both cognitive function and the ability to perform certain daily tasks that rely on mental abilities. The study is being conducted with a socioeconomically and ethnically diverse population at 6 sites. This symposium will report early data from the pilot study (n=170) of this multisite trial in order to characterize the targeted study population, including the relationship between cognitive abilities (memory, reasoning, speed of processing) and everyday cognitive function and mobility; the role of depression and sensorimotor factors (vision, balance, grip strength) as well as cognitive abilities in explaining variance in everyday function; and short-term change in cognitive abilities and function. Discussion will place the findings from this heterogenous sample in the context of results of other studies to date and note the implications for intervention.

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FUNDING SOURCES FOR RESEARCH ON OLDER WOMEN'S ISSUES. PART I: FEDERAL AGENCIES

J. K. Rosenbach, JKR Associates,
4601 North Park Avenue, #1517,
Chevy Chase, MD 20815

Participants:

M. Davenport (Invited) (Health Care Financing Administration, Baltimore, MD-----)

A. Duncker (Administration on Aging, Washington, DC 20201)
M. Goodwin (Department of Veterans Affairs, Washington, DC 20420)
J.T. Harden (National Institute on Aging, NIH, Bethesda, MD 20892)
G. Niederehe (National Institute of Mental Health, Rockville, MD 20857)

The need to increase the current supply of personnel engaged in aging research is well documented. The shortage cuts across all sections represented in the Society: the Biomedical Sciences, Clinical Medicine, Behavioral and Social Sciences, and Social Research, Policy, and Practice. These Federal agencies have demonstrated their commitment to funding aging-related projects. They have also been a source of funding for research on women's issues. Since there is a recognized need to increase the research devoted to women's issues, participants will provide information, including the priorities of their respective organizations, application procedures, and eligibility guidelines.

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NARRATIVE GERONTOLOGY: PROSPECTS FOR THE FUTURE IN THEORY, RESEARCH, AND PRACTICE

P. G. Clark, Program in Gerontology and RI Geriatric Education Center, The University of Rhode Island, Kingston, RI 02881.
Participants:
G. M. Kenyon (St. Thomas University, Fredericton, New Brunswick, Canada E3B 5G3) Narrative Gerontology: Concepts and Prospects.
B. de Vries, P. Southard, S. Blick (San Francisco State University, San Francisco, CA 94132) and P. Suedfeld, R. Krell (University of British Columbia, Vancouver, BC, Canada, V6T 1Z4) Life Lines, Life Events, and Life Stories: Legacies of the Holocaust.
P. G. Clark (The University of Rhode Island, Kingston, RI 02881) Narrative Gerontology in Clinical and Community Practice: Current Applications and Future Prospects.
Discussants:
R. J. Manheimer, North Carolina Center for Creative Retirement, University of North Carolina at Asheville, Asheville, NC 28804.
J. D. Webster, Department of Psychology, Langara College, Vancouver, British Columbia, Canada V5Y 2Z6.

As an emerging field, narrative gerontology raises important philosophical questions and offers practical applications to capture the lived experience of growing older. Drawing on such concepts as metaphor, life story, and life line, narrative gerontology offers new directions for the development of theory and knowledge about the nature of aging. This symposium provides a systematic overview of specific contributions of narrative gerontology to the field of aging and an analysis of its implications for future directions in research, education, and service. The first paper explores "life as story" as a root metaphor for the field of aging and examines methodological and epistemological issues growing out of this metaphor. These include the social constructionist/existentialist debate, the stories versus data problem, and the noise versus significant finding issue. The second presentation focuses on the implications of life lines and life stories as a research methodology in narrative gerontology, with examples drawn from specific research involving Holocaust survivors. The third paper surveys the literature regarding the clinical and community-based applications of narrative gerontology methods and makes recommendations for their continued development and use as practical approaches in the health and human services fields. Discussion will focus on the future of narrative gerontology and its continued implications for theory and practice.

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SPIRITUALITY AND DECISIONMAKING IN LATE LIFE: CULTURAL PERSPECTIVES.

E. Chapleski, Institute of Gerontology, Wayne State University, 87 E. Ferry, Detroit, MI 48202.
Participants:
F. Ahmadi, Department of Sociology, Uppsala University, Sweden.
Reflection on Wisdom and Maturity: Dialogues with Two Sufis.
D. Brown, Director of Urban Health, CULMA, Wayne State University, Detroit, MI 48202.
Religion and Coping: Differences Among African American and Caucasian Women.
E. Chapleski, Institute of Gerontology, Wayne State University, 87 E. Ferry, Detroit, MI 48202.
Chi'nishnaabe, American Indian Elders Of The Great Lakes: Spirituality And The Influence Of Culture And Environment
F.K. Ejaz, The Benjamin Rose Institute, Margaret Blenkner Research Center, Cleveland, OH 44114.
The Influence Of Religion And Personal Values On Life-Prolonging Treatment Decisions In Institutionalized Elderly
Discussant:
R. Ray, Department of English and Institute of Gerontology, Wayne State University, Detroit, MI
This symposium examines the importance of cultural context to the understanding of meaning in the appraisal of health and well being, late life decisions and spiritual development. Presentation topics include Sweden's Sufi population, Great Lakes American Indians, and comparative studies of African

Americans vs Caucasians and Jewish-Catholic-Protestant nursing home residents. Late life development - from the perspectives of spiritual development and gerotranscendence - is studied by means of in-depth interviews among Iranian Sufis living in Sweden, supporting the notion that some cultures may facilitate the achievement of wisdom during aging. Research from nursing homes in Cleveland examines differences in decisions for end-of-life treatment by religious affiliation, concluding that practitioners must understand individual differences when respecting end-of-life treatment decisions. Race differences are shown to exist between Caucasian and African American women in the use of religious factors to cope with stressful health circumstances in a study of middle aged and older women with breast cancer. The worldview of America's indigenous people is explored, posing the premise that acculturation and embeddedness in the native culture will present diverse forms of spirituality.

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IDENTITY PROCESSING STYLES AND THE NEED FOR SELF-ESTEEM

J.R. Sneed, S.K. Whitbourne, Department of Psychology, University of Massachusetts at Amherst, Amherst, MA 01003

This study sought to evaluate the validity and reliability of the identity and experiences scale (IES), a newly developed Likert-type self-report scale designed to quantitatively assess the identity processing styles of identity assimilation, accommodation, and balance, in older adults (Whitbourne, 1996). A second purpose was to examine the relationship between these styles, as measured by the above scale, and the need for self-esteem (Greenberg, Pyszczynski, Solomon, 1986). The IES and Rosenberg's (1965) 10-item self-esteem questionnaire were administered to a sample of community dwelling older adults (age range 40-95; M=63.31, SD=13.31) consisting of 81 males and 161 females. A principal-components factor analysis with Varimax rotation on this sample yielded the expected three factors accounting for 34.5% of the variance. The present sample yielded α coefficients of .72 for the assimilation subscale, .85 for accommodation, and .88 for balance. Multiple regression analysis was conducted to examine the relationship between identity style and self-esteem yielding results consistent with theory. Results will be discussed in terms of the identity process perspective of the aging individual and the need for self-esteem. Previous results from pilot studies of the IES will also be reviewed.

SELF-REGULATION AMONG YOUNGER AND OLDER ADULTS.

S.T. Charles & L.L. Carstensen, Department of Psychology, Stanford University, Stanford, CA, 94305-2130.

The self has been studied in terms of stability and change, including such constructs as personality traits and discrepancies between actual and perceived selves. Researchers have found that older adults are more self-accepting than younger adults and have hypothesized that self-related knowledge increases with age, resulting in greater self expertise. Two studies examined self-perceptions among younger and older adults. In Study 1, participants (N=91) ranging from 17 to 87 years-old rated over 100 adjectives on a likert-type scale according to the degree of personal relevance and emotional resonance of each word. Findings indicate that although older adults reported greater emotional resonance for the words listed, older and younger adults did not differ in ratings indicating how well the words described them. In Study 2, 171 individuals, aged 18 to 94 years, were queried randomly 35 times over a one week period as to how well 6 self-selected adjectives described them. Ratings were examined according to how much they fluctuated both within and out of the context of social interaction. Findings indicate that the pattern of responses by older adults fluctuated less than the pattern reported by younger adults. Overall, findings indicate that older and younger adults describe themselves in similar terms, but that older adults are more stable in their self-views.

SOCIOEMOTIONAL SELECTIVITY THEORY AND THE ELDERLY WITH CHRONIC MENTAL ILLNESS.

W.M. Spaid 214 KMB, School of Social Work, Brigham Young University, Provo, UT 84602.

There is a dearth of research on the needs of the chronically mentally ill elderly population, particularly in the area of social supports and social interaction. The purpose of this study was to address the nature of social interactions for elderly with chronic mental illness in the context of selectivity theory. In contrast to disengagement, activity, and reciprocity theorists, selectivity theorists postulate that, as we age, we become more selective about whom we interact with. Furthermore, emotionally close interactions with others assumes greater importance. Although a number of studies support selectivity theory, none of these studies are composed of samples of people with a mental illness. Therefore, in this study emotionally close contacts were compared for elderly with and without a chronic mental illness.

This was a descriptive study based on the one-time administration of a questionnaire to 97 non-randomly selected elderly individuals residing in the community. Based on MANOVA, although there were significant differences in frequency of family contacts, frequency of contacts with friends, and the number of friends, based on whether or not respondents were receiving in-home nursing services, attending a senior citizen's center, or receiving outpatient psychiatric services for a chronic mental illness, there were no differences in the frequency of giving or receiving emotionally close social supports. These findings suggest a more positive approach to assessing the social interactions of people with chronic mental illness and call into question assumptions about the nature of social relationships for this population. Especially noteworthy are the implications of there being no differences in giving emotionally close social supports for those with a chronic mental illness as compared with those without such an illness. This suggests that these individuals may have more to offer in relationships than usually has been assumed.

PERSONAL PROJECTS AND VALUATION OF LIFE IN FRAIL ELDERS.

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Little (1983) defined a personal project as "a set of interrelated acts extending over time, intended to maintain or attain a state of affairs foreseen by the individual . . . (it) reflects cognitive, affective, and behavioral aspects of human conduct" (p. 276). The present research investigated the relationship of physical health and perceived quality of life to the mental health and "valuation of life" (VOL) of 445 community residents ages 70+. VOL expresses attachment to life as independently of mental health as possible and was posited as a mediator between physical and mental health, on the one hand, and wish to live, on the other. In turn, personal projects were seen as meaning - providing intentions for future activity. Codes were developed for 4 open-end questions about personal projects, goals, and the future. One type of project, "Winding down," was clearly associated with poor health and mental health. Other project types, "Home orientation," "Recreation," "Social orientation," and "Personal Growth" were contributors to perceived quality of life, positive mental health, and VOL, but minimally related to health and depression. We conclude that the personal project contributes to a sense of meaning in life and a reason for existence that is partially independent of physical and mental pathology. The implications of the existence of personal projects for the quality of the end of life will be discussed. Research supported by National Institute of Aging grant AG11995.

SELF REPRESENTATIONS AMONG THE VERY OLD. A. Schiller, R.E. Dunkle, University of Michigan School of Social Work; B. Roberts, M.R. Haug, Case Western Reserve University, Center on Aging and Health. Recently Labouvie-Vief et al. (1995) examined self-representations across the life span. Using a cognitive developmental approach, these researchers reported that self-representations varied from adolescence to later life. This complexity reaches a peak during mid-life and diminishes in old age to a level comparable to pre-adolescence when the self remains relatively undifferentiated from primary social groups. Labouvie-Vief et al's sample ranged in age from 13-86. The study reported here extends Labouvie-Vief et al's work to the very old by exploring self-representations among those 85-98 years of age. Using data from a convenience sample of elders aged 85-98 (n=193), responses to the question," If you had to write a paragraph about yourself describing yourself to someone who does not know you, what would you say?" were coded by a schema devised by Labouvie-Vief et al. to determine the self representation on a scale from 0-4 in complexity. Results showed that the two most prevalent scores were 1 and 2 with the average score being 1.4. Labouvie-Vief et al. found a mean score of 1.3 among those that were very old in their sample. A correlation of self-representation and age indicated that self representation declined as age increased, a similar finding in Labouvie-Vief et al's work. In addition, we determined that higher self esteem was related to lower self representation, indicating a greater tendency to describe oneself using concrete characteristics and less likely to engage in a "reflective processes" like wishing, goal setting etc. Self representation was not related to measures of health, function or mental health (Research supported by NIA AG05635).

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IS BLOOD THICKER THAN WATER? REMARRIED MOTHERS' RELATIONSHIPS WITH GROWN CHILDREN FROM PREVIOUS MARRIAGES

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By some estimates, nearly a third of all Americans are members of stepfamilies, also called blended or reconstituted families. In response, an increasing number of publications have focused on stepfamilies with young resident stepchildren. However, an information gap exists concerning the long-term implications of stepfamily experience. Beyond initiatory survey data, little is known about intergenerational relations when remarried parents and stepparents become older, and children have grown up. As part of a larger study, this paper focuses on remarried mothers' accounts of relationships with now-grown children from previous marriages. A population whose perspectives have rarely been documented, the small sample of older mothers (n=17), remarried an average of 23 years, traced the trajectories of relationships from before their remarriages to the present. Coding of transcribed in-depth interviews, analysis of excerpt files of direct quotes, and non-parametric statistical tests of association indicated that most women had successfully maintained ties with biological children, in spite of troubled periods during children's teenaged years. Relations with biological children were consistently closer than those with stepchildren. Current difficulties in later-life stepfamilies often resulted from competition between children and husbands, when the role of mother took precedence over that of wife.

TRANSFORMING THE MOTHER-DAUGHTER RELATIONSHIP IN LATER LIFE

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Theoretically, the parent/child relationship shifts from a hierarchical relationship, where the parent has more power, to a symmetrical, peer like relationship in later life. Ideally, the mother and the adult-child are able to renegotiate their relationship so that their relationship is based on mutuality and equality. Conceptually, if a daughter remains in a child-like relationship with her mother, she is more at risk for caregiving strain than those daughters who have experience a transformation in their relationship with their mothers. However, there is very little research that examines whether the type of relationship that a daughter has with her mother has any relationship with her level of strain, especially in the context of caregiving. To examine this question, 175 adult-daughters completed a questionnaire packet assessing the type of mother-daughter relationship and role stain. In multiple regression, after removing the variance accounted for by the daughter's health, the amount of help she gives her mother and the amount of assistance her mother needs, the type of relationship remained a significant predictor for tension, anger, fatigue and confusion accounting for 16% to 17% of the variance in these subscales of the Profile of Mood States. Thus, those daughters who remained in a child like relationship with their mothers experienced more role strain than those daughters who had achieved a peer like relationship with their mothers. These results provide support for the theory that feeling like an adult in one's relationship with one's parent plays an important role in understanding role strain. This results have implications for interventions aimed at reducing caregiving strain.

Dyadic Characteristics Influencing the Quality of Helping Relationships between Older Mothers and their Adult Daughters

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Prior research on intergenerational helping relationships has focused on family caregivers providing assistance to the frail or cognitively impaired elderly. The present study extended this work by looking at help which is less demanding, but which nevertheless permits the parent to continue living independently in the community. Adult daughters and their older mothers who lived alone (N = 44 dyads) were interviewed to explore the links between three variables and both partners' satisfaction with the helping relationship. The first variable was interpersonal control. It was found that mother and daughter feelings of lacking control in the relationship were negatively correlated with both own and partner helping satisfaction. The second characteristic was perspective taking. Results indicated that for daughters, good perspective taking was associated more strongly with their own satisfaction than their mothers'. The opposite pattern was found for mothers: good perspective taking was linked to daughter satisfaction rather than to their own. The third dyadic characteristic concerned the attributions made about helping exchanges. In both a positive and negative ambiguous helping situation, dispositional and situational attributions for self and partner were examined. Correlations indicated that attributions made about the partner were more strongly associated with mother and daughter helping satisfaction than were attributions about the self. In particular, dispositional attributions made about the partner during negative situations were strongly related to both own and partner helping satisfaction. Taken together, these results suggest the importance of considering helping as dyadic, with older parents and adult children influencing both their own outcomes and those of their partner.

MOTHER-DAUGHTER RELATIONSHIPS IN MIDDLE AND LATER LIFE: EVIDENCE FROM OBSERVATIONAL DATA.

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This study of mother-daughter relationships, using a feminist perspective, situates women's intergenerational ties within the context of the gendered family labor of caregiving, nurturing, domestic work, and kinkeeping. We videotaped 31 pairs discussing an issue (10 min.) and working together on a task (10 min.). We sought to identify processes through which the women maintain their own and each other's autonomy as well as their connections to each other. The mean age of mothers was 79; daughters 49. The health of mothers varied, but most had chronic conditions limiting IADLs. We viewed the videotapes repeatedly, and employed a qualitative analysis to identify themes and patterns. Both mothers and daughters were purposeful in (a) attending to one another's lives and circumstances; (b) cooperating in carrying out women's family labor; and (c) avoiding open conflict and accommodating the differences between them. Mothers and daughters showed respect for themselves and each other through these strategies. The findings are consistent with survey data showing that intergenerational relationships are reciprocal.

CARING FOR MOTHER: THE NATURE OF TRANSFORMATIVE LEARNING AND THE DAUGHTERS WHO CARE

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Moving into the new millennium, adult daughters will most likely be the primary caregivers for their parents, yet little is known about how they make meaning of, or learn from the experience. Drawing on phenomenology and utilizing in-depth interviews, this study offers a compassionate, detailed look at five daughters' experiences caring for their frail elderly mother, the nature and meaning of that experience, and the potential for transformative learning. Through narrative case studies and a thematic analysis, common themes were uncovered. Results indicated that caregiving triggered the transformational learning journey. All of the women had dramatically changed how they saw and acted in the world during the caregiving process. Emotions such as rage, fear, guilt, loneliness, love, and hope seemed to be the strongest determinant of change in behavior. Also crying out in each story were feelings of loss, spirituality, final resolution, and one final chance for love. Emotions and change were readily apparent to each caregiver long before cognitively processing or reflecting on the meaning of the experience. Reflection, however, later facilitated understanding and solidified or completed their transformational learning process. This emphasizes the important role adult educators can play in helping caregiving daughters understand the meaning of their experiences and facilitating the completion of the transformational learning process.

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EFFECTS OF HEALTH STATUS ON SEXUALITY IN OLDER ADULTS

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Changes in health status frequently occur with age. Health conditions potentially affect aspects of sexuality in older adults. In a sample of community-based adults (799 men, 657 women) ages 50 and older, men and women described their health on a 5-point scale, 85% rated themselves at least as in "good" health. Most frequently reported health issues included arthritis, high blood pressure, and use of antihypertensives. 42% of the women reported having had a hysterectomy. Women differed signficantly on overall health but not for aspects of sexuality. Comparison of men who used/did not use antihypertensives showed significant differences for health, self esteem, and intimacy. Comparisons of men and women who used antihypertensives showed no significant differences for health but men reported greater sexual interest, participation, and satisfaction than women. Both men and women with arthritis saw themselves as less healthy than their counterparts without arthritis, women without arthritis also reported more sexual satisfaction than those with this disease. Although men and women with arthritis did not differ significantly on perceptions of overall health and reported sexual participation, men did have more sexual interest and satisfaction than women. Overall health was significantly correlated to selected aspects of sexuality in this study. Overall health, arthritis and the use of antihypertensives were not significant predictors of sexual interest, participation, and satisfaction in either men or women. Such findings can increase our understanding of the relationship between health and health variables and aspects of sexuality in older men and women. BSS 24

INFLUENCES OF SOCIOECONOMIC STATUS, SOCIAL NETWORK, AND COMPETENCE ON PSYCHOLOGICAL WELL-BEING IN LATER LIFE

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Meta-analysis is used to synthesize findings from 242 empirical studies on the association of socioeconomic status, social network, and competence with psychological well-being in the elderly. All three aspects of life circumstances are positively associated with psychological well-being. Income is correlated more strongly with well-being, compared to education. The quality of social contacts shows stronger associations with subjective well-being, compared to quantity of contacts. Whereas the quantity of contacts to friends shows higher correlation to subjective well-being compared to quantity of contacts to adult children, there are somewhat higher associations between quality of relations with adult children, compared to quality of friendship. Influences of gender and age on the association of socioeconomic status, social network, and competence with psychological well-being are investigated as well. Our data support Carstensens' theory of socio-emotional selectivity and Rosenmayrs' concept of intimacy at a distance.

An Application of Classification and Regression Tree (CART) Analysis: Predicting Optimal Agers, K.A. Wallace, C.S. Bergeman, Department of Psychology, University of Notre Dame, Notre Dame, IN 46556.

The purpose of this study was to identify the effect of multiple resilience resources on well-being in the elderly. A multidimensional battery was administered to two samples of individuals over the age of 60. The CART procedure was chosen for its ability to uncover complex, nonlinear relationships, for the interpretability of the tree models that it generates, and for its ability to handle the global nature of the hypotheses posited. Like regression, this procedure considers all possible predictors and selects the best one possible at a given step. Unlike regression, predictors may be entered more than once and do not have to be the same on both sides of the tree. Data from Sample 1 were used to generate a tree, which was then validated with data from Sample 2. Three hypotheses were tested: 1) positive cumulative, 2) negative cumulative, and 3) compensatory. Results provided support for a positive and a negative cumulative effect: individuals high on both perceived control and physical health displayed better psychological well-being (pos. cum.), whereas individuals low on control, social coping, and health displayed lower levels of well-being (neg. cum.). Social coping did not compensate for decreased control, thus the compensation effect was not supported. These findings are consistent with the notion that control is particularly relevant in later life, while also demonstrating the inability of other resources to completely compensate for decrements in control. Because the tree generated with CART identifies individuals' status in terms of psychological well-being, as well as the paths taken to reach these outcomes, the results have implications for intervention. For example, by identifying the paths taken to achieve different outcomes, the design of more individualized interventions is possible.

SUCCESSFUL AGING AT AGE 80: FINDINGS FROM THE TERMAN STUDY OF THE GIFTED.

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This study examined correlates of successful aging for 399 participants in the Terman Study of the Gifted between the ages of 75 and 84 (mean age = 79.6) who responded to a questionnaire in 1992. Successful aging was operationalized in terms of high versus low status on perceived health, psychological well-being, and the combination of health and well-being. In a series of multivariate analyses of covariance, dependent variables were grouped conceptually into seven sets: social relationships, goals, activities, health behaviors, health context, health problems, and stress and coping. Age and self-rated financial adequacy were covariates. The results showed significant positive effects for variables emphasizing active approaches to life in combination with positive health experience and context. In discriminant analyses, the most highly weighted variables in the perceived health function reflected fewer health problems and higher activity levels. The most important variables in the psychological well-being function emphasized positive goals, satisfaction with relationships, satisfaction with health care, and lower stress. The results are discussed in terms of the multifaceted nature of successful aging.

DEMOGRAPHIC ANTECEDENTS AND STABILITY OF ALTRUISUM IN LATE LIFE. E.Kahana, Department of Sociology, Case Western Reserve University, 10900 Euclid Ave., Cleveland, OH 44106-7124; E. Midlarsky, Columbia University; & C. King, Case Western Reserve University.

Altruistic attitudes have been considered as relevant dispositions of successful aging, having been shown in our prior work to serve as important antecedents of helping others (Midlarsky & Kahana, 1994). We considered demographic antecedents of altruism and stability of altruistic attitudes in a longitudinal study. Data are presented based on the Elderly Care Research Center Altruism Scale, a reliable five-item index of altruistic orientations. In a sample of 563 old-old residents of a Florida retirement community, we found evidence of remarkable stability in altruistic attitudes over a three-year period. Among demographic characteristics, gender was found to be the most important predictor of altruistic orientations, with women exhibiting significantly greater altruism than men ($p < .01$). These data support expectations about traitlike or dispositional qualities of altruism and its interrelationship with gender-based socialization and life experiences.

INFLUENCE OF PARK USE AND OTHER LEISURE ON STATE OF HEALTH AMONG ADULTS 65-84.

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Research indicates that lifestyle factors such as leisure activities contribute to successful aging. Within the realm of leisure, there is also evidence that natural environments (i.e., park use) benefit mental and physical health. This study investigated the influence of park use, other leisure activities and size of leisure repertoire on selected measures of health among a sample of 899 adults ages 65-84 (m=72). Participants were recruited at municipal parks, grocery stores, malls, and senior centers in the Cleveland area to complete a questionnaire on leisure, demographics, health history/behaviors, and psychosocial characteristics. At the time of recruitment, blood pressure was also measured. Park and other leisure activities were grouped as: sedentary, social, hobbies, low aerobic, and high aerobic. Leisure repertoire consisted of the total number of leisure activities engaged in regularly (1-6). Stepwise multiple regression analysis was used to examine the influence of demographics, physiological measures, psychosocial characteristics, leisure and health behaviors on a general health rating. The overall regression model was significant (r^2= .24) and the strongest predictors of health were CES-D (β=.34, $p<.001$), age (β=.13, $p<.02$), consumption of high fat foods (β=.12, $p<.02$), park visits per year (β=.12, $p<.02$), education (β=.12, $p<.02$), leisure activity (β=.11, $p<.04$), park activity (β=.10, $p<.05$), and Body Mass Index (β=.10, $p<.05$). Although depression and age have a strong influence on health, type of leisure activity and in particular park use, appear to be important contributors to the rating of general health.

NEGOTIATING CHANGE: A QUALITATIVE STUDY WITH OLDER ADULTS EXPLORING THEIR EVERYDAY URBAN ENVIRONMENTS. TOWARDS SUSTAINABLE WELL-BEING.

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There has been a growing interest in the critical study of successful aging which employs positive models that depart from constructions of loss, deficit, and decline. With people living longer, often in better health, and with the majority of older adults living in communities, the call has been sounded to extend gerontological knowledge to studying and theorizing adults' everyday environments.

This paper reports on a qualitative study with eight older adults living in a middle class neighborhood in New York City. This study uses multiple methods to understand older adults' lived experiences via interviews, walks, mapping, observations and photographs. The juxtapositions of contextual analysis (analyzing physical and sociocultural dimensions of their environments) and textual interpretations of present, past and future narratives, reveal the complicated nature of development in the midst of change. Focusing on the negotiating strategies that older adults use to create, contest and transform their environments, we gain knowledge of what aspects of the settings of their everyday lives sustain or challenge their well-being. The qualitative analysis of the data suggests the diverse ways in which older adults are navigating through discourses of health and "successful aging," through changing contexts such as the city, the neighborhood, social networks, and the health care system, as well as through their multiple lived worlds. The analysis also suggests that the body is one intersection of these social, spatial and political processes. It is a site where these processes are inscribed and negotiated, and thus may be revealed. Discussion covers the theory and practice of *sustainable well being*, developed to encompass the dynamic processes of change and to reveal different practices of power and agency within everyday contexts. Sustainable well-being provides an open framework for inquiry, straddling disciplines, with the ability to chart diverse subjective interpretations. As such, it offers a practical platform from which to derive policy and planning implications.

EFFECTS OF GENDER AND MARITAL STATUS ON HEALTH AND WELL-BEING OF OLDER ADULTS.

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This study examined the relationship of marital status and gender to the health and activities of older adults. 607 members of OASIS, a national education program for older adults, (79% female; 44% married; age 73 years) completed questionnaires measuring current activity levels, mental health, physical health, and overall morale. ANOVA tests revealed no main effects for gender or marital status on mental health, physical health, or morale. The current activity levels of married adults were higher than those unmarried ($p<.001$). No gender differences were found for current activity levels. An interaction effect showed that divorced men had the highest activity levels, and widowed women had the lowest activity levels ($p<.05$). While gender and marital status do not affect perceived health and well-being in older adults, they do affect activity levels. Overall, married older adults are more active than nonmarried; when taking gender into account, differences appear which have implications for future intervention and studies.

NEVER MARRIED OLDER WOMEN: ANOTHER PATH TO SUCCESSFUL AGING

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This is an analysis and synthesis of research on the lives of never married older women including data on antecedents of singlehood, family and nonfamily ties, health, work and retirement, life satisfaction, and census data on rates of singlehood. While negative stereotypes such as old maid and spinster still persist, and being single over the life course is a form of deviance, our analysis supports an image of successful and productive aging. Moreover, the model of age stratification seems most helpful in understanding rates of singlehood over time.

WERE YOU BORN THAT WAY? PATH ANALYSES OF PERSONALITY CHANGE ACROSS THE LIFE SPAN

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The literature is replete with studies that examine personality stability in early and middle adulthood. Yet, there are very few, if any, studies that look at stability and the end of the life span -- a time when there are often major changes in one's biology and life circumstances. Thus, we conducted a longitudinal study on a sample of 74 elderly women residing in Allegheny County, a rural county in western New York. At the outset of the study, they were 60 years or older. We assessed these individuals in 1987 and in 1993/94 on selected items of Costa and McCrae's (1978/1985) NEO Personality Inventory. These items were used to assess the personality dimensions of neuroticism (N), extroversion (E), and openness to experience (O). Path analyses revealed considerable stability on all three trait dimensions. Yet, the path analyses also revealed personality was impacted by changes in one's life events. For example, less education, decreased social support and increased need, along with neuroticism in 1987, all meaningfully influenced the trait of neuroticism. Whereas, less extroversion went with greater need, and poorer health, while more extroversion went with higher education, greater age, increased social support and being extroverted in 1987. These conflictive findings on personality stability/instability are reconciled within a developmental-contextual model.

THE 85+ : WHAT THEY DO FOR FAMILY; WHAT THEY DO FOR FRIENDS.

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As individuals 85 and over are increasingly a focus of attention, it is important to develop a balanced understanding of their social integration and the contexts in which it occurs. This report describes the contributions provided by individuals 85 and over to family members, those made to friends and then compares the two. The respondents were 457 people 85 and over residing in 8 suburban towns in Massachusetts who completed a telephone interview on 18 contributions provided to family members or to friends/neighbors. The data reveal that the mean number of total contributions made to family exceeds that made to friends. Some contributions are provided more frequently to friends (giving companionship, giving comfort, checking up on someone, and visiting the sick) while others are provided more frequently to family (being confided in, giving money, giving gifts). In general, acts of an instrumental nature are provided more frequently to family members than to friends, while acts of an expressive nature are provided more frequently to friends than to family. Living with someone else, the number of living siblings, the number of living children, and being male are each associated with more contributions to family. Living alone and group membership are associated with doing more for friends. These findings suggest that while the family remains a primary recipient of care, friends are also important, particularly for individuals living alone and for women.

THE RELATIVE IMPACT OF PERSONAL RESOURCES AND SOCIAL SUPPORT ON THE WELL-BEING OF THE OLD-OLD

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The debate as to whether it is one's personality or social milieu that determines well-being in later-life is particularly relevant to the old-old cohort, given the characteristic diminution of their social networks. This paper reports the results of a study of the impact of selected personality factors and social support network variables on three well-being outcome measures---self-reported health, mental health and life satisfaction---among adults aged 75 and over in Israel. The study sample was drawn randomly from the Ministry of the Interior's population registry among persons residing in the central region of the country (N=194). The analysis controlled for background sociodemographic characteristics, and three distinct health variables---disability, self-reported diseases and morbidity. The outcome variables were each regressed on the study variables in a hierarchical procedure. The results of the analyses revealed that self-reported health was explained primarily by the block of health variables (R^2= .59). Mental health was most accounted for by the personality factors of internal locus of control and coping style (R^2= .52). Life satisfaction, on the other hand, was explained by a collection of disability, personality and support variables (R^2= .39). The study underscores the existence of different paths to the various aspects of well-being among the old-old and points, as well, to the need for adopting multiple indicators of well-being when studying the oldest cohort.

GENDER CROSSOVER IN THE OLDEST OLD: MEN ARE BETTER OFF THAN WOMEN.

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We have previously demonstrated that older men have a substantially higher mortality risk associated with cognitive impairment compared to women. In short, this results in men more readily dying of diseases associated with cognitive impairment while women live with those diseases. This may explain the paradox of why women live longer yet a greater proportion of them also have chronic illnesses. In our population-based study of centenarians, 15% are men. We hypothesized that these men, though much fewer in number, would be functionally better off than our female subjects. In a representative subsample (5 men, 28 women) of the study, 80% of the men had a Barthel index rating score of 80-100 ("independent" in their ADLs), while 18% of the women were "independent" (25% required "minimal help", 21% were "partially dependent", 18% were "very dependent" and 18% were "totally dependent"). Our preliminary findings suggest a dramatic effect of demographic selection among very old men compared to women, resulting in a proportionately higher functional status in centenarian men.

COGNITIVE FUNCTION AMONG RUSSIAN ELDERLY AND ITS NUTRITIONAL CORRELATES

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We present data on patterns of cognitive function (CF) and their nutritional correlates among 2,500 Russian elderly aged 55 and over. Results are from nationally representative data of the Russia Longitudinal Monitoring Survey (RLMS), based on three-stage stratified cluster probability samples of the Russian population. Published data relating CF to nutritional status are limited, and to date no such data have been available from Russia. The RLMS uses a measure of CF similar to the one in the AHEAD Study in the US. RLMS data show a pattern of CF scores very similar to the US, with a mean score of 18.7 (maximum: 35) and a standard deviation of 6.5. There are significant gender and age effects--means ranging from 21 for 55-59 year olds to 13.1 for those 75 years and older; males have higher scores than females (19.5 and 18.3 respectively). Using data from the 1994 and 1996 waves of the RLMS, we looked at correlates of CF over a two-year period. In multivariate analyses, adjusting for age, gender, disability, weight change, socioeconomic factors, and other health status measures, we found that compared to normal weight individuals, being underweight is negatively associated with a high CF two years later (OR=.34, 95\% C.I.=.12, .92), while being overweight shows a positive association (OR=1.32, 95\% C.I.=1.06, 1.65). These results add weight to mounting evidence that overweight is protective in a number of ways among the elderly. The mechanisms and universality of these results are worthy of further study.

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BENCHMARK MEMORIES IN ADULTHOOD: CENTRAL DOMAINS AND PREDICTORS OF THEIR FREQUENCY

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A body of research has demonstrated a "reminiscence bump," in which individuals report a preponderance of memories from late adolescence/early twenties. This study addresses this phenomenon, as well as how the expression of autobiographical memories may be related to self representation. The sample consisted of 220 adults aged 40 years and older (mean age = 60 years, range = 40-87 years). Participants were asked to fill in a timeline with important events in their lives, then describe three of these events in detail. Participants also completed a variety of socio-emotional measures.

Participants reported a statistically significant number of events from their twenties, and the majority of events were related to love, marriage, and family. Discussion focuses on sample differences in reporting events, as well as family climate and coping variables.

SPOUSAL LOSS MODEL-- A 3-STAGE LIFE-CHANGE MODEL WITH CLINICAL IMPLICATIONS

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The Spousal Loss Model is a three-stage model that offers a roadmap for a life-change journey initiated by the death of a spouse (or significant other). Beginning with the spouse's death, the model frames the journey from death of a spouse to a new life of contentment. Loss of an anchor through spousal death creates a crisis that precipitates the life-change process. Change procedes through "Treading Water" (Stage 1), "Pseudoequilibrium" (Stage 2), and "Renewal and Resolution" (Stage 3).

The literature on change together with clinical interviews of younger and older widows and widowers present validate the usefulness and general applicability of the model. The poster session will present the three-stage model and identify different choices available at each stage for older widows and widowers.

A GERONTOLOGIST EXAMINES GENESIS: THE LIVES OF THE PATRIARCHS EXAMINED FROM A LIFE COURSE PERSPECTIVE

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The Torah has been the source of scholarly inquiry, spiritual inspiration, and ethical guidance through the ages and it offers a rich source of stories about older adults in an evolving Jewish community. As seen from a developmental perspective, the matriarchs and patriarchs face the challenges of aging around the continuities and discontinuities created by the challenges of bereavement, disability, and relocation: Noah, faced his mortality , survived while his world is destroyed; Sara doesn't survive her bereavement at the assumed death of her son; Abraham began his existential search on the death of his father; Isaac, disabled and blind, has his advanced directives ignored by his wife and son; Jacob was forced to relocate to a new country at the end of his life; and Moses died knowing his dream was to be completed

by others. Eriksons' concepts of generativity and transcendence frame these individual life stories with strong generational connections. This poster will examine these Biblical lives within the Erikson's theoretical framework to continue this ancient conversation about aging.

MILTON, AGE, AND BLINDNESS: INDIVIDUAL BIOGRAPHY AND SOCIAL DISCOURSE

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How an individual confronts the sensory decrements of aging is shaped at both the individual and societal levels. This study uses this framework to develop a metaphor of disability and aging by examining John Milton's Sonnets VII, XVII, XXII, and XXIII. John Milton, 17th century writer and epic poet, experienced the onset of blindness in late-life. This study differs from previous analyses of Milton's sonnets in two ways: firstly, the selected sonnets are analyzed together to derive continuities of themes as reflections of Milton's ability to sustain continuity of person and purpose. Secondly, the sonnets are seen as expressions of self bounded in historical context, and consideration is given to 17th century English socio-political change, and to concurrent meaning of blindness, including: blindness as linked to morality, and Turner's (1987) argument of the 17th century Western European view of the mind-body relationship. Results illustrate Milton's belief in a divine purpose mitigating the dissociation between body and mind, forging psychological reorganization and continuity in the face of aging and disability. The metaphor transcends Milton's lifetime to illustrate the isolation experienced by older people with late-life visual impairment, and the struggle to maintain a sense of self and purpose.

THE RELATION OF EARLY PARENTING TO ATTACHMENT AND ADJUSTMENT INTO OLD AGE

L.S. Bourbeau & G. Labouvie-Vief, Department of Psychology, Wayne State University, Detroit, MI 48202.

This study focused on the continuity or discontinuity of individuals' representations of attachment relationships, and their significance in adjustment throughout the lifespan into old age. Participants ranging from 20 to 87 years (N=247) reported on early parental caregiving and current variables of attachment and adjustment. Though two-thirds of the sample reported congruent experiences of childhood and adult attachment behavior, one-third of the sample reported incongruent patterns. Participants with positive and negative congruent reports scored highest and lowest respectively in life satisfaction, while incongruent participants reported scores in between. However, both groups' scores on depression and defensive coping revealed that current attachment styles were more related to (and predictive of) adult adjustment than to reported early parental caregiving. Findings did not differ with age, suggesting that in this sample intervening time did not modify relationships, and that aging was not related to the quality of reported attachment behavior.

This research was supported by grant AGO9203 from the National Institute on Aging awarded to Gisela Labouvie-Vief.

THE INFLUENCE OF CAREER CHANGE ON MEN'S MIDLIFE MENTAL HEALTH

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Career change at midlife is a relatively common phenomenon, and may become more common among future cohorts, as increasing longevity and improved health later in life increase the number of years adults spend in the workforce. Due to rapid technological change, middle-aged workers may also be encouraged to retool their current job skills, or to retrain for new jobs all together. The context in which such career changes occur may impact the mental health of midlife men. The life stress paradigm suggests that voluntary versus involuntary job changes may differentially impact well-being. Temporal comparison theory suggests that career changes resulting in upward mobility will enhance mental health, while downward moves may lead to self-criticism. This paper uses data from the Wisconsin Longitudinal Study to examine the effects of adult career change on two dimensions of mental health: personal growth and depression. The analysis is limited to 2,330 men, 770 career changers and 1,560 with stable careers. Results show that involuntary movements significantly affect depression scores, while movements into self-employment positively affect personal growth scores. The effects of upward and downward mobility are less clear-cut, unique trajectories of mobility, such as movements from manual jobs to professional jobs enhance mental health, even when physical health and early-life depression are controlled. The paper calls for more thoughtful analysis of unique career trajectories, and their impact on health outcomes.

COMPARING THE CHANGING LIFE PATHS OF THREE COHORTS OF WOMEN

Norella Putney, Merril Silverstein
Andrus Gerontology Center, University of Southern California, Los Angeles, CA 90089-0191.

How have social changes over the past five decades differentially affected the life course trajectories of women of different age groups? How have these women adapted to gender role changes in family and work in terms of their psychological well-being, life satisfaction and status attainment over time? This research compares the gender role beliefs, life course trajectories and experiences of women from three birth cohorts in the context of rapid economic and social change. The first cohort came of age in the family-oriented 1950s. Expecting to marry early and have 3 or 4 children, this cohort then experienced a dramatic change in norms about women's participation in the labor force. A second cohort who came of age in the 1970s did not unequivocally embrace motherhood but developed ties to the workplace similar to the pattern once reserved for men. The youngest cohort entered adulthood in the 1990s, a period characterized by ambiguity over gender roles and economic uncertainty. Data for three cohorts of women from the 1971 through 1994 waves of the USC Longitudinal Study of Generations are analyzed. Models control for past depression, past emotional support received from parents, parents' marital and socioeconomic status during the women's growing-up years, and other variables. Findings suggest both inter- and intracohort differences in the timing and patterning of marriage, parenthood and work careers, effects conditioned by parental family structure, SES and family solidarity during adolescence.

AGE AND SEX DIFFERENCES IN PRACTICAL WISDOM AND MASTERY.

K. J. Sutton, C. A. Aldwin, Wayne State University, Department of Psychology, 71 Warren Ave, Detroit, MI 48202.

There is little consensus as to whether wisdom increases with age, although competence-related traits (i.e. mastery) do appear to develop in adulthood. We examined age and sex differences in wisdom, as assessed by the Practical Wisdom Scale (PWS; Wink & Helson, 1997), and environmental mastery (Ryff, 1989). 422 men and 495 women, participants of the Davis Longitudinal Study (age range: 28-74, M=38.61, SD=7.42) were surveyed in 1996. ANOVA revealed that the middle aged group scored significantly higher in practical wisdom than the youngest group. In addition, middle-aged men scored higher on wisdom than middle-aged women. In contrast, the relationship between age and mastery was non-linear with young middle-aged groups of both men and women scoring significantly lower that both the youngest and oldest groups. These results suggest that there may be different patterns of development for wisdom and mastery.

TEEN AND NON-TEEN MOTHERS IN MID-LIFE: LIFE COURSE TRENDS IN PHYSICAL AND SUBJECTIVE WELL-BEING.

K. Foley and T. Koropeckyj-Cox. Sociology Dept., University of Pennsylvania, 3718 Locust Walk, Philadelphia, PA 19104-6298.

The weathering hypothesis (Geronimus, 1992, 1994) predicts that early life disadvantage results in more rapid declines in physical health in young and middle adulthood. Descriptive analyses of physical health trends among the Baltimore Study Population, a 30 year longitudinal study of inner city Baltimore teenage mothers, support this hypothesis. These women show a rapid decline in physical health from 1984 (mean age 33 yrs) to 1995 (mean age 44 yrs) with an increase from 15% to 29.1% reporting fair or poor health between 1984 and 1995. During this same period, however, overall life satisfaction increased from 32% to 58% reporting high satisfaction between 1984 and 1995.

Using data from the National Survey of Families and Households (1988 and 1993) we test these trends comparing a nationally representative sample of women aged 30-50 (in 1988) who were teen (n=755) or non-teen mothers (n=1609). Results indicate that teen mothers are significantly more lonely and have significantly lower health in both 1988 and 1993 compared to non-teen mothers. Teen mothers are also more depressed in 1993 and experienced a significantly greater increase in depression between 1988 and 1993. These results remain significant when controlling for race and socioeconomic status. The combined findings from the NSFH and the Baltimore Study confirm the weathering hypothesis and are discussed in terms of the different life courses and contexts of teen and non-teen mothers.

CHILDHOOD EXPERIENCES AND HEALTH OUTCOMES IN LATER LIFE.

Carolyn M. Aldwin, Ana Paula Cupertino, Michael R. Levenson, & Avron Spiro III. Dept. of Human & Community Development, University of California at Davis, Davis, CA 95616.

Childhood stress may have lifelong negative effects (Kessler et al., 1997). Others, however, suggest increased resilience as a function of childhood stress. (Werner & Smith, 1992). We regressed adult health outcomes on retrospective reports of childhood stress and support, using the Childhood Experiences Questionnaire, in two samples, the Davis Longitudinal Study (N=842; M age=34.25; SD=7.69; 54% women) and the Normative Aging Study men (N=1,072; M age=70.3; SD=7.36). Both samples were surveyed in 1996. For the DLS, depressive symptoms in adulthood were associated with emotional abuse and negative ratings of childhood, while mastery was positively associated with positive ratings of childhood and illness and injury. Health ratings were inversely associated with injury and illness and negative childhood ratings, but positively associated with parental esteem. For the NAS, emotional and physical abuse was associated with both problem and binge drinking, but being unfairly treated as a child was positively associated with ego integrity. The amount of variance accounted for was generally low. Nonetheless, it is notable that childhood stressors were associated with both positive and negative outcomes in adulthood.

AGE, GENDER, AND LONGITUDINAL INVARIANCE OF THE BRADBURN AFFECT BALANCE SCALE.

S.B. Maitland, S.W.S. MacDonald, R.A. Dixon, & D.F. Hultsch, Department of Psychology, The University of Victoria, Victoria, BC, Canada V8W 3P5.

The Bradburn Affect Balance scale is a widely used measure of well-being in adulthood and aging. Using data from the Victoria Longitudinal Study, we examined the psychometric properties and longitudinal change patterns of the scale in a sample of older adults. The sample for the psychometric analyses consisted of 843 subjects ($\underline{M}_{Age}$ = 68.02, range 54-86; $\underline{M}_{Educ}$ = 14.09, range 5-24 years). Metric invariance between the young-old (range 54-68, N=461) and old-old (range 69-86, N=382) groups was established, while gender invariance (323 males, 520 females) was lacking for the negative and positive affect factors. Longitudinal changes in positive and negative affect were examined across four waves (at 3-year intervals), for a sample of 158 adults (97 females, 61 males). Repeated measures analysis of variance revealed a significant non-linear effect for time, an effect that was qualified by agegroup and gender.

EFFECTS OF AGE, SEX, AND SELF-CONCEPT CLARITY ON ADULTS' PSYCHOLOGICAL WELL-BEING

S. Owen, M. Diehl, C. Blake, P. Perkowski, & J. Williams, Department of Psychology, University of Colorado at Colorado Springs, CO 80933.

This study used Ryff's (1989) Scales of Psychological Well-Being (SPWB) to examine whether participants differed in their scores on 6 different scales depending on their age, sex, and self-concept clarity (SCC). The sample consisted of 158 adults (80 men, 78 women) ranging in age from 20 to 87 years. Participants were grouped into 3 age groups: Young adults (age 20-39), middle-aged adults (age 40-59), and older adults (age 60+). MANOVAs yielded significant multivariate effects of age group, sex, and SCC. None of the multivariate interactions reached the .05 level of statistical of significance. The multivariate main effect of age group was due to effects for Environmental Mastery (ENVMAST), Positive Relations with Others (POSREL), and Self-Acceptance(SELFACC). The multivariate main effect of sex was due to POSREL. The multivariate main effect of SCC was due to significant univariate effects on all 6 scales of the SPWB. Older adults' mean scores were significantly ($p < .05$) higher on POSREL, ENVMAST, and SELFACC compared to young and middle-aged adults' mean scores, and women scored higher on POSREL than men. The effect of SCC yielded the strongest results. Adults with medium SCC had higher scores on all 6 well-being scales than adults with low SCC. In addition, adults with high SCC scored significantly higher on all 6 scales compared to individuals with low and medium SCC. These results suggest that the perceived self-concept plays an important role in adults' psychological well-being.

HEALTH STATUS AND HEALTH CARE AS MOTIVES IN LATER LIFE MOBILITY

J.F. Watkins, Department of Geography, University of Kentucky, Lexington, Kentucky 40506-0027.

Retirement and post-retirement mobility has gained increasing interest among social gerontologists over the past several decades. Amenity retiree migrants, for example, offer tremendous potential benefits to receiving areas through savings and investment transfers and local spending. Conversely, elders may pose a social cost as they eventually become more likely to require assistance at advanced age. Empirical studies have clearly identified amenity-motivated and assistance-motivated migration associated with increasing mobility propensities among certain elderly age groups, and elderly migration decision making has thus been considered distinct from that of labor migration. This purpose of this study is to examine more fully how health status and health care are considered in the elderly mobility decision-making process. In particular the study seeks to identify the relative priority of health status/care in an information context that includes economic, social, cultural, and psychological motivations that have developed and evolved over the life course. An ethnographic approach is taken that highlights the biographic narratives of two women, both of whom have been forced to balance health status and health care considerations in their migration decisions. Their life stories indicate a lower than expected importance placed on personal health when considering a place of residence, and they illustrate how life experiences and evolving perceptions are evaluated and incorporated in the spatial decision process.

REMINISCENCE FUNCTIONS AND THE IMPORTANCE OF SHARED FAMILY MEMORIES ACROSS ADULTHOOD

Jeffrey Dean Webster, Department of Psychology, Langara College, Vancouver, B.C., Canada, V5Y 2Z6. Mary McCall, Department of Psychology, Saint Mary's College, Moraga, CA, 94575.

Recent work has demonstrated that multiple functions of reminiscence exist, adults of all ages engage in this process, and that family patterns of encouraging reminiscence during childhood may predict the frequency of reminiscence in later life. 268 participants (100 men, 168 women) ranging in age from 17-88 years, completed the Reminiscence Functions Scale (RFS) and a measure assessing the importance of shared family memories. A 2 (sex) by 8 (age decade) between-subjects MANOVA was performed with the 8 RFS factors serving as the dependent variables. Results indicated a main effect for sex, $F(1, 259) = 2.51$, $p < .05$, and age, $F(7,259) = 4.2$[illegible], $p < .001$. The sex by age interaction was not significant. Women scored higher on the RFS factors of Identity and lower on Bitterness Revival. Older adults scored higher on Death Preparation and Teach/Inform, younger adults scored higher on Boredom Reduction, Identity, Problem-Solving, and Bitterness Revival. Pearson correlations indicated that the importance of sharing family memories was significantly correlated with the RFS factors of Teach/Inform, Intimacy Maintenance, Identity, and Conversation ($rs = .39, .26, .15,$ and $.26$, respectively). These results replicate and extend earlier findings and suggest that family dynamics is a potentially important source of individual differences seen in reminiscence frequency throughout adulthood. These implications are discussed from a lifespan perspective.

The Baby Boom: A Research Agenda for Gerontologists

D. L. Morgan, Institute on Aging, Portland State University, Portland OR 97201.

Although gerontologists have long recognized the importance of the aging of the Baby Boom, most of the recent attention to this issue has come from the popular press, rather than scholars. One way to increase academic attention to this topic is to produce a research agenda that highlights the connections between the aging of the Baby Boom and the substantive concerns of our field.

This presentation summarizes an expanded version of such an agenda, which has been developed over the past three years through open-ended interviews with more than 20 social gerontologists, as well as a review of the literature. The actual research agenda currently exists as a hypertext document on a webpage located at http://www.ioa.pdx.edu/babyboom/.

This poster will use a map format to summarize the contents of that larger document.

The current version of the research agenda is organized into 12 major headings: Generational & Intergenerational Issues; Heterogeneity Within the Baby Boom; Demography; Policy Issues; Work, Finances, & Retirement; Family; Health & Health Care; Housing & Relocation; Politics & Religion; Attitudes & Identity; Lifestyle; and, Other Issues. The detailed agenda divides these 12 topics into more than 30 subtopics that contain over 150 specific research questions related to the aging of the Baby Boom.

HORIZONS AND THE QUALITY OF TIME

S.M. Weiss. Department of Physiological Nursing. University of California. San Francisco. CA 94143

This paper discusses how the experience of time is qualitatively transformed as older adults come to understand their lives in terms of a temporally-bound narrative rather than an open-ended trajectory In this interpretive phenomenological study. in-depth. semi-structured interviews were conducted with 14 African-American and Caucasian adults aged 80-94 who varied widely in functional and health status Paradigm cases and exemplars from the data illustrate how changes in embodiment can lead to an appreciation of the qualitative aspects of time. time as *full* in and of itself. rather than a vessel waiting to be filled By way of our *historical* self-understanding arising from the notion that time exists in the living of one's life through concerns and connections to others and filled out by one's changing embodied comportment. a person's circumstances can take on meaning and purpose that might not have been appreciated previously Given the late life shifts occuring in the habits. rituals. commitments. and concerns which had oriented persons throughout life. the ability to account. through narrative. for changes in one's embodiment and life circumstances can preserve the self as an integrated whole and one's life as temporally situated in a meaningful way What is at risk is the possibility of losing the ability to identify with the narrative one has lived. finding the narrative meaningless or without sensibility

THE ROLE OF EGO RESOURCES IN 2-YEAR PERSONALITY CHANGE ACROSS THE LIFE SPAN.

G. Labouvie-Vief, K. J. Sutton, J. C. Allaire, E. Y. Holmes, Wayne State University, Department of Psychology, 71 Warren Ave, Detroit, MI 48202.

This study examined the role of ego resources in 2-year longitudinal change in personality. Using the California Psychological Inventory, we examined changes in internality, norm orientation, and self-realization. 330 Participants ranged in age from 15 to 80+ (M=44.4). Repeated measures MANOVA revealed significant main effects of age for internality and norm orientation. Linear trends for both vectors indicated higher scores for older individuals. Hierarchical regression analyses showed that in addition to age and time 1 scores, time 2 scores were related to initial levels of ego development, immature defense, and depression. These results underscore the importance of considering ego resources in predicting personality change.

PROCESSES THAT CONTRIBUTE TO SUCCESSFUL AGING IN OLD AND VERY OLD AGE: THE ROLE OF SELECTION, OPTIMIZATION, AND COMPENSATION

A. M. Freund, P. B. Baltes, Max-Planck-Institute for Human Development
Lentzeallee 94, 14195 Berlin, Germany

The SOC-model stresses the importance of three processes for successful aging: Selection, optimization, and compensation. The limitation of resources (e.g., time, energy) inherent to human existence necessitates selection of domains (goals) of functioning because not all opportunities can be pursued. To reach optimal levels of functioning in the selected domains (goals), one needs to acquire, allocate, and refine internal or external resources (optimization). To maintain a given level of functioning when confronted with loss or decline in goal-relevant resources, compensatory processes (e.g., substitution of means) are needed. In old age, the limitation of resources, and loss or decline in goal-related means are likely to be amplified. Thus, we expect SOC to be particularly important for aging successful.

Data from the Berlin Aging Study (N = 200, mean-age: 83.5, 72.6 to 102.7, 51% women) are used to investigate the association of self-reported SOC and subjective indicators of successful aging.Cross-sectional, correlational analyses confirmed our central hypothesis: Old adults who reported using SOC-related behaviors had higher scores on indicators of successful aging. The relationships obtained were robust even after controlling for other measures of successful mastery. We will also present longitudinal data on the long-term consequences of SOC in old age.

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MARITAL SATISFACTION IN LATER-LIFE: THE IMPACT OF ROLE CHANGES, SPOUSE ILLNESS, AND COMMUNICATION.

Chair:

C. Shields. (Departments of Family Medicine & Psychiatry, University of Rochester Medical Center, 885 South Avenue, Rochester, NY 14620-2399)

Participants:

Rachel A. Pruchno & Julie H. Patrick. (Center on Aging, Bradley University, 141 Jobst Hall, Peoria, IL 61625). *Raising Grandchildren: Reports from Grandmothers and Grandfathers.*

D. L. Wright, W. S. Aquilino M. M. Seltzer. (Dept. of Child and Family Studies, 1300 Linden Dr., University of Wisconsin, Madison, WI 53706, 1500 Highland Dr., Waisman Center University of Wisconsin, Madison, WI 53706). *The Impact of Caregiving on Relationship Outcomes for Elderly Wives.*

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C. Shields (Dept of Family Medicine & Psychiatry, University of Rochester Medical Center, 885 South Avenue, Rochester, NY 14620) *Marital Interaction/Communication in Later-life Couples Coping with Cancer*

Discussant:

D. Flori (Great Plains Family Practice Residency Program, 3500 NW 56th Street, Suite 100, Oklahoma City, OK 73112-4518)

Couples in later life face numerous challenges to their quality of life. In this symposium we examine two of these challenges: the comparatively new phenomenon of grandparents raising grandchildren and the increasingly ubiquitous phenomenon of spouses caring for their ill partners.

Each of these studies examines marital relationships as they face stressful situations that are both culturally and clinically significant. Our culture places a great deal of emphasis on marital and family issues, yet little is known about how couples and families successfully negotiates changes such as these.

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DEVELOPING HOME CARE OPTIONS BASED ON PERSONAL SERVICES FOR LIFE AT HOME WITH SERIOUS DISABILITY

Robert Morris and Francis Caro, Gerontology Institute, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125-3393

Participants:

Bruce Vladeck (Mt. Sinai Medical Center, Policy Center, New York, NY) Overview of the personal assistance gap in long-term care.

Joshua Wiener (Urban Institute, Health Policy Center, Washington, D.C.) The current state of public sector ability to develop personal services.

Sharon Keigher (University of Wisconsin Milwaukee, School of Social Welfare, Milwaukee, WI) Labor force implications of consumer-directed long-term care.

Francis Caro (University of Massachusetts Boston) The potential for personal assistance services designed for the self-pay market.

In the coming decades, the United States will be challenged to develop stronger paid personal assistance services for those with serious long-term disabilities. The participants will address the need for major attention to the development of formal personal assistance services that complement informal caregiving, that in some instances complement health care, and that in other instances stand apart from health care needs. A framework will be established for expanded personal assistance services that are responsive to needs of diverse populations with disabilities, that assure high quality care, that maximize consumer choice, that attract a high quality workforce, and, yet, are affordable. The prospects for development of strong personal assistance services both through public and private sector financing will be examined. Included will be attention to the potential for development of systems of personal assistance services designed explicitly for the self-pay market.

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INVOLVING DIVERSE POPULATIONS IN RESEARCH STUDIES

S.L. Karon, Center for Health Systems Research and Analysis, University of Wisconsin, 610 Walnut St., 1158 WARF Office Building, Madison, WI 53705

Participants:

D.L. Yee (National Asian Pacific Center on Aging, Seattle, WA) Involving Special Populations In Research Goes Beyond Sampling And Advice

J. Johnson, K. Jedrziewski, N. Smith, E. Mackenzie, and F. Walker (Institute on Aging, University of Pennsylvania, Philadelphia, PA) The theory and practice of academic and community partnerships for conducting research on minority health issues

S.L. Karon & D.R. Lauver (University of Wisconsin, Madison, WI) What You See Is What You Get, But May Not Be What You Want: Including Lesbians in Research Studies

K. Eckels (World Institute on Disability, Oakland, CA) Participatory Action Research in the Disability Community

Discussant:

T. Miles, M.D., Ph.D., (University of Texas Health Science Center at San Antonio, San Antonio, TX)

The population of the United States is becoming simultaneously more diverse and more aged. Successful efforts to understand and plan for the needs and resources of future generations of elders require recognition of this diversity. While many researchers recognize the value of including diverse populations in their studies, they are stymied by lack of understanding of how to best achieve that inclusion. This session will address issues of working with diverse populations in research studies.

This session will begin with an overview of the many ways that inclusion of diverse groups impacts the structure of research. The session will then focus on the issues involved in conducting research with three special population groups: members of racial/ethnic minorities, lesbians, and people with disabilities. Presenters will discuss barriers and strategies for involving members of each of these groups in research studies.

This session is of importance to researchers, people who fund research, and people who make use of research findings, whether for program or policy development.

We believe this important session is appropriate for consideration as the Ollie Randall Symposium.

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Symposium Title: "I'm Too Old to Get AIDS": AIDS and the Older Adult - - Issues for Policy, Practice and Service Delivery
Chair: Charles A. Emlet, Ph.D., LCSW, Senior Medical Social Worker/Program Director, Solano County Health and Social Services; 1735 Enterprise Drive, Bldg #3, MS 3-110, Fairfield, Ca 94533, 707/421-6660 (work); 707/438-2500 (fax); 707/557-0134 (home); email caemlet@aol.com, "Case Management Services To Older Persons With HIV/AIDS"
Presenters: Nathan Linsk, Ph.D., Midwest AIDS Training and Education Center, University of Illinois at Chicago, "Older Adults As HIV Caregivers: Social Supports (Description of the National Association On HIV Over Fifty (NAHOF))"
Jane P. Fowler, Good Samaritan Project, Kansas City, Missouri, "Older People Living With HIV: Peer Education And Consumer Perspectives"
Joan Perkell, MSW, ACSW, Clinical Social Worker, Geriatric Psychiatry, Hillside Hospital, Glen Oaks, NY: "Education And Service Delivery Issues For PWA/HIV Over 50"
Diane Zablotsky, Ph.D., Assistant Professor, University of North Carolina, Charlotte, Charlotte, North Carolina, "Collaboration Between The HIV Care Network And The Aging Network"
Joanna Weinberg, J.D., L.L.M., Adjunct Assistant Professor, Institute for Health and Aging, University of California, San Francisco (Presenter and Discussant), "Policy Issues For Older Persons With HIV/AIDS: HIV Care In A Managed Care Environment"
Session Objectives: Participants (health professionals, case managers, aging and HIV network providers and administrators, and policy makers) will be able to better understand the factors associated with HIV/AIDS in older adults including policy issues, practice models, effects on peoples of color and service delivery issues, and will obtain information on practice and service delivery models.
Summary: This symposium will address issues of older persons affected by HIV/AIDS from perspectives of prevention/education, services delivery, caregiver issues, social support, public policy, case management, as well as the prospective of the consumer. Persons age 50+ comprise more than 10% of US AIDS cases; 25% are over 60. Research suggests that older adults know little about HIV/AIDS, are less likely to be tested, and that service providers and providers do not recognize the degree of the problem. Risk factors are no longer due to blood transfusions alone; all transmission paths are present: heterosexual contact, injection drug use and multiple sexual partners. The HIV/AIDS pandemic has a multifactoral impact on older persons; one-third of AIDS patients are dependent upon an older parent for financial, physical and emotional support. This symposium brings participants together to discuss the wide variety of issues that affect older adults with HIV/AIDS and those who care for PWA/HIV. Discussion will include models of cooperative service delivery, education and prevention strategies, older consumers as peer educators, and older adults as HIV caregivers. Participants an opportunity to consider how they might better coordinate service delivery in their local area. Finally, participants will learn about the national organization focusing on aging and HIV/AIDS and learn about potential opportunities for involvement in this organization.

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IMPLEMENTING MARKET CHOICE IN MEDICARE AND SOCIAL SECURITY
Virginia Reno, National Academy of Social Insurance

Participants
M. Pauly, (University of Pennsylvania, Philadelphia, PA)
D. Chollet, (The Alpha Center, Washington, DC)
P. Diamond, (Massachusetts Institute of Technology,
J. Gregory, (ERISA Industry Committee, Washington, DC)

Discussants
(1) H. Aaron (The Brookings Institution, Washington, DC)
(2) Robert Friedland (National Academy on Aging, Washington, DC)

Both Medicare and Social Security policy makers are considering ways to rely more on private organizations and markets. For Medicare, the Balanced Budget Act of 1997 (BBA) already mandated such a change. With Social Security at the top of the national agenda, privatizing the system is one of the main topics being discussed. Among other considerations, such shifts pose significant implementation challenges for both programs. This session will consider these issues, their costs, and the ways in which implementation of market choice pose similar and different implementation issues for both programs.

Medicare
The BBA created Medicare+Choice, which will expand the types of private health plans through which beneficiaries may receive their health services as well as an annual process of beneficiary choice among plans. Implementation requires the Health Care Financing Administration to managed activities it has not addressed before including design of a risk-adjusted payment rate to health plans based on encounter data, an annual open enrollment season for 39 million beneficiaries, certification and regulation of new types of health plans, and the management of a Medicare restructuring likely to be considered by the Bipartisan Commission on the Future of Medicare include replacing Medicare with a system in which individuals' money that would have gone to payroll taxes purchase private insurance policies for their retirement. Such individualized approaches to financing health services also impose new and significant implementation challenges.

Social Security
Policy makes are examining proposals to privatize Social Security. Some proposals intend to substitute an individual savings, or defined-contribution, plan for all or part of the benefits which retirees receive. Other proposals would change the investment policy of the Social Security trust funds by putting part of the funds in private securities. Both kinds of proposals have far-reaching implications that are not yet fully know. Among the crucial issues are (1) how might plans for individual accounts be implemented (2) what new risks are posed by investing Social Security funds in the stock market, and (3) what administrative models, if any, can protect against those risks?

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ENVIRONMENTS FOR PEOPLE WITH DEMENTIA: ASSESSING NEEDS AND PLANNING INTERVENTIONS
U. Cohen, University of Wisconsin-Milwaukee, Milwaukee, WI 53201.
Participants:
N.J. Chapman, P.C. Carder, (Institute on Aging, Portland State University, Portland, Or 97207) Characteristics of Long-Term Care Settings that Encourage Family Visits to People with Alzheimer's Disease
E. Lipstreuer, K.Perez, J. Marsden, M. Profitt, C. Weber, S. Briller, M. Calkins, (I.D.E.A.S., Inc., Cleveland, OH 44118) Designing a Staff-Completed Environmental Assessment Protocol
S. J. Torgrude, (Boelter Design Group, Madison, WI 53593) Post-Occupancy Evaluation of a Special Care Unit Using Dementia-Specific Design Criteria
G.D. Weisman, K. Diaz Moore, (Institute on Aging and Environment, University of Wisconsin-Milwaukee, Milwaukee, WI 53201) Environments for Dementia Day Care: Assessing the State of the Art
Discussant:
G. Weisman (Institute on Aging and Environment, University of Wisconsin-Milwaukee, Milwaukee, WI 53201)

With the rapid growth of -- and the demand for -- dementia-specific care and environments, there is also a growing need for better understanding of the needs, as well as critical examination of current solutions.

This symposia addresses adult day care and long-term settings for people with dementia. The first presentation focuses on identification of factors in the physical and organizational environments which promote visiting and other social activities; the second presentation describes a comprehensive post-occupancy evaluation based on dementia-specific design criteria. The third presentation offers a methodology and an instrument to conduct environmental assessment leading to detailed facility-specific design recommendation.

The final presentation addresses what is currently known about environments for adult day care -- focusing both on needs as well as current practices and solutions; the discussion will address promising approaches for assessment of needs, and suggested tools for evaluating interventions and solutions.

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DECLINING INCOME INEQUALITY AMONG THE ELDERLY: 1969-1989. M.N. Ozawa, George Warren Brown School of Social Work, Washington University, St. Louis, MO 63130-4899 and R.Y. Kim, College of Social Work, Ohio State University, Columbus, OH. In the midst of growing income inequality among the U.S. population, income inequality among the elderly has been declining. This study investigated the change in income equality from 1969 to 1989 and determined the extent to which public income transfers helped lessen the degree of inequality among elderly persons, as compared for adults and children. Thus, this study investigated (1) the change, over time, in the Gin coefficients (a measure of income inequality) at three stages of income distribution, viz., (a) pretransfer income, (b) post-social-insurance-benefits income, and (c) post-welfare-payments income, and (2) determined the effectiveness of social insurance benefits and welfare payments in lessening income inequality in 1969, 1979, and 1989, and between these years. Major findings were that at the posttransfer stage: (1) the Gin coefficient for elderly declined 3.7 percent from 1969 to 1989, whereas those for adults and children increased 16.1 percent and 22.4 percent, respectively; (2) the distributive effects of social insurance benefits (mainly social security) in lessening income inequality among the elderly were not only great each year, ranging from 29.8 to 36.5 percent, but also increased 14.7 percent from 1969 to 1989. Because of these favorable developments for the elderly, their Gin coefficient at the posttransfer stage changed from 128 percent to 106 percent of adults' and from 131 percent to 103 percent of children's. These findings indicate that income inequality among the elderly, which traditionally had been greater than among adults and children, had become very close to income inequality among these two age groups. Data source: 1970, 1980, 1990 Current Population Surveys.

FACTORS INFLUENCING RETIREMENT AND IMPLICATIONS FOR INCREASING THE SOCIAL SECURITY RETIREMENT AGE

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In light of proposals to further increase the Social Security normal retirement age and/or to increase the early retirement age, it is important to determine whether older workers would be able to remain in the labor force longer than they currently do in order to avoid a reduction in Social Security benefits. This study uses data on persons age 55-70 from the 1990 SIPP panel and persons age 55-63 from the 1994 wave of the HRS to address:

- What are the differences between workers by age and retirement status across health status, employment, income, and other characteristics? How do older workers who continue to work differ from those who are retired?
- How much of retirement at various ages is 'involuntary'?
- How important are health status, employment, income, age, and other characteristics in the decision to retire?

This study finds that retirees are in poorer health than workers of the same age. In addition, the younger a worker leaves a job, the more likely it is that the departure is involuntary due to either job loss or poor health and the less likely it is that the departure is voluntary retirement.

A multivariate model is used to determine the relative effects of the various demographic and employment factors on the decision to retire. In general, factors that are significantly related to retirement include working in a physically demanding job and having pension coverage. Having three or more functional limitations also increases the likelihood of retirement, but since few workers have this characteristic, it has only a small effect on overall retirement rates. Several factors are correlated with delayed retirement, including having health insurance coverage from one's employer and having a spouse who is working.

THE ECONOMIC CASUALTIES OF RETIRING BECAUSE OF POOR HEALTH

L. McDonald & P. Donahue, Faculty of Social Work University of Toronto, Toronto, ON M5S 1A1.

It is only recently that involuntary retirement as a result of poor health has resurfaced in the retirement literature. In light of the changes to social security, the renewed interest stems from preliminary research that indicates that poor health, as a reason for retirement, has a negative effect on the retirement income of both men and women. The focus of this research is to examine the economic circumstances of persons who retired from their jobs at some time in their work careers because of poor health. Using data from the first wave of the *Health and Retirement Study 1995*, the bivariate analysis compares those who retired because of poor health with those who retired for other reasons, on sociodemographic, work history and income characteristics (N=1,804). Two models are estimated. The first model assesses the relative effects of retirement due to poor health on retirement income for all retirees, while the second model examines the factors that predict the income of only those who retire for reasons of ill health (N=337). Results from the bivariate analysis indicate that those who retire because of poor health are disadvantaged on most sociodemographic characteristics and their income in retirement is significantly lower than those who retired for other reasons. The income models indicate that retiring because of health carries larger economic penalties for men than for women and that health has a larger effect on retirement income than retiring because of unemployment, dissatisfaction with job, or to caregive. Implications of these findings are examined in terms of recent welfare reform and impending changes to social security, namely the raising of the age of entitlement.

HEALTH INSURANCE AND LABOR MARKET TRANSITIONS OF OLDER WORKERS

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Labor force transitions at the end of the work career may be complex, including not only retirement but movements to part time work and self-employment. The prior literature has focused on the role of financial factors such as pensions in affecting the path towards complete labor force withdrawal. Recent studies have found that health insurance availability is also an important determinant of retirement behavior among older workers. In this study, we consider the effects of access to employment-based retiree health benefits and the cost of those benefits on transitions to reduced labor hours and self-employment among older workers who are not yet Medicare eligible. The results of this research are particularly important in light of policy proposals to allow the near elderly to buy into Medicare. Using data from the first 2 waves of the Health and Retirement Survey (1992, 1994), we find that transitions to retirement as well as transitions to part-time employment are determined by both traditional demographic and economic variables, as well as the measures of access to health insurance and cost sharing arrangements.

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DEJA VU, OR IS IT? NURSING HOME USE IN THE 1990's

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There is no question that the health and long-term care delivery system has changed in the past two decades. Despite these changes and a common belief that there has been a growth in the short stay nursing home resident, findings of this study indicate that a substantial portion of nursing home residents have always been discharged with a length of stay of three months or less. Data reported from the 1977, 1985, and 1995 National Nursing Home Surveys, and a composite Ohio data source suggest that despite these patterns, there is also an increase occurring in the size of the short stay population. Data also show a change in the characteristics of nursing home residents over time, with residents becoming increasingly disabled. An analysis of the shifts in long-term care use suggests a complex series of factors influencing the length of stay and case mix of the modern day nursing home.

DEALING WITH "DIFFICULT" PATIENTS IN A NURSING HOME

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While the results of patient satisfaction surveys are being increasingly used by managed care organizations and even the hospitals to judge the quality of care provided by doctors, it is becoming evident that the patients and their families have become more demanding in recent years. For the nursing home population, in some cases, it is the residents' families that often become over-aggressive and over-demanding regarding the healthcare issues of their loved one. While most families choose to maintain a congenial relationship with the healthcare providers some family members perhaps, because of their guilt or over-expectations, create an adverse relationship with the nursing home staff. Difficulties often pertain to the area of choice of medication, tests and procedures, advanced directive and other modes of treatment.

We describe our experience with a variety of difficulties faced with six residents and/or their families in the recent past. Although with an interdisciplinary team approach these difficulties were successfully overcome, the healthcare providers felt very frustrated with these situations. Further research and in-depth studies are required to provide guidelines for the staff in the management of difficult residents and their families in the long-term care institutions.

DEFINING THE PSYCHOLOGIST-RESIDENT TREATMENT RELATIONSHIP IN A LONG-TERM CARE SETTING.

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Mental health services are increasingly being provided in long-term care (LTC) settings but the unique aspects of the therapeutic relationship in LTC have been minimally defined. A conceptual understanding of the treatment relationship in LTC may be an initial step towards investigating treatment effectiveness. Unlike many traditional therapy settings, treatment goals are often more focused on temporary symptom reduction and increasing comfort rather than complete problem resolution. Additionally, therapeutic goals of residents, family and LTC staff may conflict. Reviewing perspectives of the resident, staff and treating psychologist can assist in creating a more coherent definition of the psychologist-resident treatment relationship in LTC. The current paper discusses the above perspectives of the role of psychologists in LTC and examines the difficulties encountered in defining treatment in this setting.

THE COSTS OF PROVIDING HIGH QUALITY CARE IN NURSING HOMES

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Quality of care in nursing homes continues to be a focus of long-term care policy, with significant research efforts directed towards improvement of methods to measure and assure quality. Little is known, however, about the processes that lead to high quality of care and the costs associated with them. In this study we estimated the marginal and average costs associated with production of three risk adjusted outcomes: risk adjusted mortality, risk adjusted decline in functional status and risk adjusted worsening decubiti. Economic and statistical analysis techniques were applied to a unique data set that incorporates financial and organizational information about nursing homes with resident level clinical data. Logistic regression models were used to create risk adjusted outcome measures. The data included over 500 nursing homes in New York State. Results indicate that the marginal and average costs of producing high quality care depend on the specific outcome. Lower costs were found at both homes with poor and excellent outcomes. This suggests that quality improvement and superior outcomes could be associated with cost savings, indicating the need for further studies to identify specific process characteristics that lead to both improved outcomes and lower costs.

PHYSICIANS' INTIATIVE: A STUDY OF WILLINGNESS TO PRACTICE IN NURSING HOME SETTINGS

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Although once regarded as "warehouses of death," formal long-term care settings such as nursing homes are being socially "re-constructed" as viable resources within the continuum of care. Considering the increasing numbers of individuals who could potentially serve as a future patient base for physicians within long-term care facilities, one might assume that the number of physicians willing to provide care within this setting would increase. However, physicians have been reluctant practice within the nursing home setting. Twelve physician focus groups(internal medicine and family practice) were used as means of determining the primary factors which influence a physician's reluctance to practice in the nursing home setting. In addition, suggestions were made by the focus groups as to the manner in which the facilities could increase physician participation within this particular setting.

EMPLOYER ATTITUDES TOWARDS LONG-TERM CARE INSURANCE:RESEARCH RESULTS AND POLICY ISSUES.

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The purpose of this study is to examine the status and future of the employer-sponsored market for long-term care insurance. A survey of approximately 5,000 benefits professionals,sponsored by the American Compensation Assn. in Scottsdale,AZ will be conducted in June 1998. Three areas will be analyzed:(1)employer-sponsored plans' average premiums and benefits;(2)employer attitudes towards group long-term care benefits, and (3)employers' response to the Health Insurance Portability & Accountability Act (HIPAA) which allows deductible contributions to qualified long-term care policies. The survey parallels a study by Cohen and Kumar(1997)on individuals' attitudes towards long-term care insurance. The author intends to repeat the survey in the future as IRS clarifications of HIPAA impact employers' ability to offer and subsidize the cost of the group long-term care insurance benefit.

USE OF ENTERAL FEEDING TUBES IN NURSING HOMES

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There is still debate as to the primary purpose of feeding tubes - to keep comatose or patients with advanced cognitive or functional disability alive, or to potentially rehabilitate frail elderly. The purpose of this research project was to describe the demographic and clinical characteristics of residents with feeding tubes, evaluate whether any residents have rehabilitation potential, and describe outcomes including removal of tube, mortality, and nutritional parameters. We tested the hypothesis that enteral feeding reflects the nutritional needs of the patient. This study employed a longitudinal research design using the Minimum Data Set (MDS) assessment instrument that was piloted on ten states in 1990 and 1993 (N=4,245); 294 with tube feeding and 3,951 without tube feeding. Logistic regression using SUDAAN showed that younger, highly debilitated, nonwhite residents with cerebrovascular accident are more likely to have feeding tubes, that the presence of feeding tubes was independently associated with increased 6-month mortality, and that body mass index and weight were preserved by the use of feeding tubes. We conclude that although enteral feedings work, they are primarily used to keep highly debilitated and relatively younger patients alive and that there is little evidence for widespread use of tubes for nutritional support of residents with rehabilitation potential.

OBRA MANDATE FOR THE CHRONIC MENTALLY ILL RESEARCH RESULTS AND POLICY ISSUES

K. Buckwalter, University of Iowa, Center on Aging , 234 Medicine Admin Bldg, Iowa City IA 52242-1101

Participants:

K. Carman, (Health Services and Policy Research Program,Washington D C 20036) Through an institutional looking glass Making sense of the development and implementation of OBRA in Illinois.

R. Anderson (Institute for Health, Health Care Policy and Aging Research, Rutgers University, New Brunswick, NJ) Role of Intermediate Care Facilities in meeting the needs of the mentally ill Treatment and policy implications

K. Sherrell & K. Buckwalter (Buehler Center on Aging, Chicago 60611 and Center on Aging, Iowa City 62242) What are their clinical needs?Profile of the chronically mentally ill elderly who remained in nursing homes after OBRA

Discussant:

Susan Schultz, MD (Department of Psychiatry, University of Iowa, Iowa City 62242)

The federally mandated Medicaid Nursing Home Reform Amendment (OBRA) was intended to evaluate the policy and treatment implications of housing the mentally ill in nursing homes A case study in Illinois shows that the provisions of the law were confusing, were inconsistently interpreted and applied, and did not achieve the desired outcomes This symposium shows how and why organizations in Illinois changed from believing that nursing homes were inappropriate places for the mentally ill, to viewing them as necessary and appropriate As a result, while state officials anticipated 4000 residents would move out of the nursing homes only a small fraction did so Multivariable analysis indicates that the primary factor predicting movement was the date of assessment, not individual needs Results of an evaluation study of services created due to OBRA and factors that predict provision of services will be presented Research on clinical profiles provides new information which explains why an earlier studies showed no relationship between demograhic or clinical information and treatment recommendations from PASARR Theories of policy development and implementation are discussed

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A ROYBAL CENTER INTERVENTION TO REDUCE FEAR OF FALLING: WHO BENEFITS?

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Knowing who is most likely to benefit from an intervention can make the best use of limited resources. A recent Roybal Center group intervention to reduce fear of falling was effective in increasing falls efficacy and ability to manage falls. This analysis investigated the predictors of change in these outcomes, i.e., who is likely to show greater improvement. Data (n=402) from baseline, and 6 week and 12 month follow-ups were used in multivariate models including sociodemographic factors, the Sickness Impact Profile (SIP) to measure function, affect, control of fear of falling, and baseline measures of Falls Efficacy (FE) and Falls Management (FM). The predictors of the two outcomes were the same. Greater improvements at 6 weeks and 12 months in FE and FM occurred for subjects with lower scores on these measures and lower SIP scores at baseline. Improvement in FE and FM at 12 months was also related to greater control of fear of falling at baseline. At baseline, those subjects with lower FE and FM were female and reported greater dysfunction, less activity, and greater fearfulness. These findings indicate that subjects who reported more dysfunction and concerns about falling benefited the most from the intervention. The findings also underscore the importance and value of targeting interventions to persons in greatest need.

(Funded by NIA: AG11669).

ACCIDENTS AND AGE: A STUDY IN SCOTLAND

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The aim of this locality study was to investigate reported and unreported home accidents amongst elderly people. The data was collected using two methods: (1) a postal survey of 3,575 people aged 65+ living in one locality, and (2) interviews with a sample (N=100) of those reporting having had an accident in the previous 12 months. Accidents were prevalent, with 40% reporting at least one accident; most were minor. The most common category of accident was 'bumps and drop', though combining 'falls' and 'slip and trips' created the biggest category. Most accidents took place in the kitchen. There was a slightly curvilinear relationship between age and accidents with the prevalence of accidents declining slightly from age 65 to age 79 and then increasing. The only other socio-demographic factors associated with age were gender (more females than males reported accidents) and living arrangements (those living alone reported more accidents than those living with others. Recommendations include (a) Accident alarms for all those over age 80 and for those who are disabled or chronically ill, (b) The inclusion of questions about accidents in the over-75s health assessment conducted by all general medical practitioners in the UK, (c) Local authorities should provide a consultation service on accident prevention and treatment for minor injuries such as burns.

(This study was commissioned by the Greater Glasgow Health Board)

EMPLOYMENT AND HEALTH AMONG BEREAVED ELDERLY MEN.

T.R. Fitzpatrick,[1] E. Greene,[2] R. Bossé,[3] Saint Joseph College, W. Hartford, CT 06117.[1] KPMG Strategic Health Solutions Practice, Boston, MA,[2] Normative Aging Study, Veterans Administration, Bedford, MA 01730.[3]

Research has indicated that the negative effects of stress on health among bereaved elderly men occur within the first six to twelve months following the bereavement event. Other studies have found that bereavement can have long-term effects on social functioning and mental health. However, employment has been found to buffer the strain produced by stressful life events. The purpose of this study was to examine the effects of employment on physical and mental health among bereaved elderly men during the first year, and over a three year period following the bereavement event. We selected four groups of men from the Normative Aging Study: those bereaved within the past year (N= 381), a comparison group of non bereaved (N= 876), those bereaved within the past 3 years (N= 462), and a

comparison group of non bereaved (N= 518). The results from the separate regression analyses indicated that employment had a stress mediating effect on physical health among men bereaved within the first year following the event, but had no significant effects on mental health. However, the effects of employment mediated stress on both physical and mental health among men within 3 years of bereavement, suggesting that employment can also benefit men who have been bereaved over a longer period of time. Implications for paractice and future research are discussed.

GRANDPARENTS AND OTHER RELATIVES REDEFINING FAMILY CARE IN A HEALTH CARE ENVIRONMENT

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As the health care environment and family structure changes it is necessary for health care and social service providers to anticipate the emergent service needs of nontraditional families, particularly grandparents and others relatives raising others' children. This study assessed the health care utilization patterns and service needs of grandparents and other relatives raising children and 2) reexamined the philosophy of family centered care with respect to the needs of families headed by grandparents and other relatives. The family centered model referenced seeks to recognize the family's strengths, individuality, coping strategies, and developmental needs of families in the provision of health care (Hostler, 1991). Thirty-one respondents completed a 30-item survey instrument regarding their use of services at their primary care center and services needed by their family to provide care for children in their custody. As expected, these grandparents and relatives acknowledged that their status within the health care system was not initially recognized as the primary caregiver. However, respondents identified health care services and informal support systems that have helped them to negotiate the health care system and transition in their role as primary caregivers of children. The primary needs reported were medical consent (12.9%), financial assistance (29.0%), school related assistance (29.0%), medical care for themselves and the children (38.7%), home repairs (41.9%), and counseling (51.5%). This study calls for reexamination of the definition of family and reevaluation of health care service delivery policies and practices for grandparents and other relatives raising children.

Impact of Church-Based Exercise Program on Sedentary and Overweight Older Adults

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This study examined the impact of a church-based exercise program on the health behaviors of 35 sedentary or overweight older adults. Post-test self-reports, corroborated by family members orfriends, revealed that older adults adopted new exercise and stress management behaviors. The class was taught by allied health science students as part of a one semester elective course entitled, Health Promotion and Aging.

A survey of 30 African-American churches revealed that the characteristics of the churches associated with willingness to host an exercise program are church size, percent elderly, and socioeconomic status.

ASSESSMENT OF A HEALTH PROMOTION PROGRAM MODEL FOR EARLY DETECTION PRACTICES OF BREAST CANCER FOR ELDERLY WOMEN

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Based on a survey in Puerto Rican elderly women about knowledge and beliefs related with breast cancer, a health promotion program model was designed. The purpose of the program was to minimize the barriers to accomplish the early detection practices of breast cancer in the elderly women population. The model was designed and implemented in a community in Puerto Rico. The main activity of this program was the educational sessions about breast cancer. In addition, one-day training was organized to the health professionals related with these centers. To determine the efficiency of the program two groups of women were defined with those participants of the educational sessions. The first group (experimental) received the basic support (transportation, programming date, and reminder) to attend a clinical evaluation, and the second one did not receive any support. The objective of the assessment was to determine the accomplishment of the early detection practices of breast cancer. Almost 60 women were eligible for this assessment, 30 in each group. By the end of April, an interview will be made to determine the efficacy of the program. Due to the sample size, non-parametric methods will be applied to compare both groups.

PHARMACEUTICAL CARE FOR PATIENTS WITH CHRONIC CONDITIONS

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Drug noncompliance, drug interactions, and other drug-related problems create substantial health risks for patients with chronic conditions and increase the cost of health care. The Pharmaceutical Care Project was designed to improve drug compliance and reduce drug-related problems through comprehensive medication review and on-going patient monitoring. A pharmaceutical care intervention was implemented in 6 pharmacies: 3 owned by and 3 contracted with an HMO in the Midwest. Patients were invited to receive pharmaceutical care if they had asthma, COPD, CHF, or hypertension with heart disease (other than CHF) (N = 264). Pharmacists were trained to provide pharmaceutical care. Six months after the initial pharmaceutical care encounter, a survey was sent to participants, enrollees who declined to participate, and a control group of patients who had the same medical conditions but were enrolled in different clinics (N = 740 completed surveys; response rate = 70%). The participants and decliners were similar in self-reported health status, although the decliners tended to be younger and were more likely to be employed. In the survey, participants were more likely than either the decliners or the control group to rely on advice from pharmacists and to use multiple methods to remind themselves to take their medications. In addition, compared to decliners and controls, the participants were about twice as likely to report experiencing "symptoms or problems that you believe are due to your prescription medications." This paradoxical finding suggests that pharmaceutical care may increase awareness about medication side effects.

EATING ALONE: IMPACT OF BEREAVEMENT ON NUTRITION OF OLDER WIDOWS AND WIDOWERS.

V. Richardson, College of Social Work, and M. Teaford, School of Allied Medical Professions, The Ohio State University.

The loss of a spouse can have a profound effect upon the eating habits of an older woman. Research has shown that older widows are more likely to skip meals, eat snacks, and to eat alone than are married older women (Rosenblaum and Whittington, 1993). This may be due in part to the loss of the role of spouse and cook as well as to loss of a companion with whom to share the meal. Older men are less likely to have shopped for groceries and prepared meals than are older women. What is the impact of the loss of a spouse upon their eating habits ? Two hundred older widowers living in a Midwestern metropolitan area were surveyed about their living arrangements, family, retirement, health, and need for assistance. They were compared with 300 older widows living in the same community who had been interviewed earlier. About two-thirds (64%) of the older widowers reported that they frequently ate at regular times and 71% reported that they ate from the major food groups daily. Analysis showed no significant differences between widows and widowers in these areas. Older widowers were however more likely to receive help with meal preparation while older widows were more likely to cook for themselves than were the men. Negative affect as measured by the Bradburn scale was significantly correlated with a balanced diet for both men and women. Those who lived alone were also at greater risk.

BRIDGING THE GAP: Getting the HIV/AIDS Message to the Aging Network

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HIV/AIDS education has focused primarily on younger persons. However, 11 percent of AIDS cases at age of diagnosis are in adults over 50. Under the leadership of the MA Councils of Aging and Sr. Ctr. Directors, a curriculum, guidebook and pamphlet have been developed to train health and aging network professionals so they, in turn, would increase awareness among seniors and other professionals. Using these materials, eleven presentations were made to professionals and seniors. Audience size ranged from 8 to 75. Survey of attitudes done at presentations among professionals demonstrated a marked increase in AIDS awareness (22% to 100%). However, this did not translate into a similar willingness to consider programming. Yet, when scheduling time was considered, seniors did attend education sessions and discussed HIV/AIDS as it affects themselves and others. Future initiatives need to consider intensive awareness campaigns that focus not only on seniors but also on aging network professionals.

THE THERAPEUTIC ASPECTS OF TAI CHI CHUAN

J.I. Barol, Institute on Aging, University of Pennsylvania Health System, 3615 Chestnut Street, Philadelphia, Pa. 19104.

Tai Chi Chuan is a favorite exercise of older people throughout the world. This presentation seeks to inform participants about the history and traditional benefits of the martial art. It will present recent clinical studies that show Tai Chi Chuan practice can have a positive affect on the elderly in regard to balance, aerobic capacity, strength, mood, attitudes toward exercise and self-image. Positive experiences of seniors enrolled in Tai Chi Chuan classes will be presented. A qualitative report on a Tai Chi Chuan program with low functioning and dementia diagnosed nursing home residents will also be presented presenting the observance of improved cognitive response and participation. Survey results showing positive experiences from seniors in a Tai Chi Chuan class will be presented.

GENDER DIFFERENCES IN HYPERTENSION KNOWLEDGE AMONG BLACK ELDERS

L. Davis, P. Perri, College of Health Sciences, Chicago State University, Chicago, IL 60628, B. McGadney, School of Social Work, Wayne State University, Detroit MI 48202.

High Blood Pressure (HBP) is a major health problem in Black elders and it is a risk factor for coronary heart disease and stroke. It is well documented that HBP can be controlled through health education and education is an important prerequisite for facilitating behavioral change. The purpose of this project was to determine if there were gender differences in hypertension knowledge among hypertensive Black elders. This baseline data were used to develop a health promotion program for this group. The sample consisted of 114 females and 23 males. The mean age was 77 and the mean number of years of with HBP was 22 years. All elders were knowledgeable about HBP. There were no significant differences in hypertension knowledge between females and males on subscales (risk, diet, basis, treatment); however, there were significant difference on specific items. Males were more knowledgeable about weight loss (.009) family history (.000), control vs. cure (.075) whereas females were more knowledgeable regarding importance of keeping doctor's appointment (.000) and asymptomatic nature of HBP (.001). Findings indicate that men and women may have different knowledge gaps related to HBP and health education programs need to be sensitive to gender differences.

ADVANCED AGE AS A PREDICTOR OF PATIENT-BASED OUTCOMES: IMPLICATIONS FOR POLICY AND PRACTICE

L.M. Dulka, W.S. Rowe, C. Pepler, M.J. Yaffe,
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This paper presents the findings related to two subsets of short-stay patients (those aged 55 to 74 and those aged 75 and over) who took part in a multi-faceted patient-based outcomes study (N=1332). Patients treated in one of five Montreal hospitals were interviewed three times over a period of three weeks to find out about their hospitalization experience and corresponding recovery at home.

Despite similar baseline physical and mental health scores, older patients reported significantly lower levels of participation in decision-making and lower satisfaction with discharge plan. Older patients also reported receiving less information about new medication and side-effects, and less knowledge of what to expect during recovery at home than did younger patients. The paper concludes with a discussion of what can be done by health care professionals and older patients and their families to ensure optimal and humane care.

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THE CENTRE FOR ACTIVITY AND AGEING'S HOME SUPPORT EXERCISE PROGRAM VIDEO

One (16 minute)/Colour videotape/1998
Produced for *The Centre for Activity and Ageing by Kem Murch Productions of London, Ontario, Canada.*
The Centre for Activity and Ageing, in collaboration with community partners, has successfully developed and pilot-tested a home-based exercise program for older adults unable to access community facilities. The Home Support Exercise Program (HSEP) consists of ten simple, yet progressive, exercises designed to maintain or improve functional independence of home-bound older adults. The HSEP includes descriptions and demonstrations of the 10 exercises by frail older adults in both a home and an institutional setting. A set of laminated cards depicting the exercises accompanies each video. Interviews with participants in the pilot study reinforce the importance of exercise for the frail, home-bound population.

Contact Nancy Ecclestone, Director, The Centre for Activity and Ageing, The University of Western Ontario, London, Ontario, Canada, N6A 3K7
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e-mail caa@julian.uwo.ca
Web site: www.uwo.ca/actage

AFRICAN AMERICAN ELDERS MAKING THE CONNECTION: EXERCISING WITH IEAD

**Forty (40) minute color videotape/1998.
Produced as part of Center For Health Intervention For Minority Elderly (CHIME) project.(One of the Exploratory Centers funded by NIA and Office of Minority Health).**

This video was developed for African American elders with high blood pressure. The elders on the tape had participated in a health promotion program to improve dietary and exercise behaviors. The video, led by a registered nurse, portrays elders performing various exercise routines ranging from chair exercises to exercises with light weights and dance sticks. The videos are designed to be used individually or for group exercise. The video includes a manual containing basic information about aging and exercise. The videotape and manual can be used by elders, family and professionals to reinforce and support exercise in this population.

Contact: Lucille Davis, RN, Ph.D., College of Health Sciences, Chicago State University, 9501 King Drive, Chicago, Illinois 60628

ADVANCE DIRECTIVES: AN INTERDISCIPLINARY TEACHING MODEL

One (28 minute)/Color Videotape/1998.
Produced By The University of Colorado Health Sciences Center And The John A. Hartford Foundation GITT Project.

This videotape is intended for all health care professional students (e.g., medicine, nursing, social work, etc.) as part of the curriculum in end of life care and interdisciplinary clinical management. The video provides information about Advance Directives (AD) in general, as well as the particulars of Colorado law. Specific references are made to the federal Patient Self-Determination Act and the landmark legal decisions in Quinlan and Cruzan. From the perspective of AD as the ultimate form of informed consent, the video presents an interaction between a patient and a health care professional, as well as discussion by an interdisciplinary panel of experts (Geriatrician, Internist, Social Worker, Nurse Practitioner, Bioethicist/Attorney) of the frequently encountered dilemmas in advance care planning and the need for early discussion of AD with patients and families in a cogent and compassionate manner.
Contact: Leela R. Bolla, MD, Dennis W. Jahnigen, MD, University of Colorado Health Sciences Center, Center on Aging, 4200 E. Ninth Avenue, B-179, Denver, CO 80262

67

Social Security Reform: Hope or Threat to Women?

Organizer: W.L. Glasse, Chair, GSA Task Force on Women.

Participants:

C.L. Estes (University of California, San Francisco, CA 94143). Older Women and Social Security: Some of the Facts

W.L. Glasse (Vassar College #347, Poughkeepsie, NY 12601)

Changing the Retirement Age: Its Impact on Women

T. Smeeding (Syracuse University, Syracuse, NY 13244) Privatization Proposals: What They Mean for Women

Discussants: M. Moon (Urban Institute, Washington, DC 20036), O. Mitchell (Wharton School, University of Pennsylvania, Philadelphia, PA 19104-6218)

Reform of Social Security has implications for all Americans. It is especially critical to women who make up 60% of those over age 65 and 75% of the elderly poor.

Proposals for reform of Social Security will affect women differently than men. With longer life expectancy and differences in patterns of work, wages, and caregiving, women are especially vulnerable to Social Security changes that threaten to reduce their economic security in old age.

This symposium will highlight the key factual evidence on the economic status of older women including Social Security, pensions, savings, work, and other income sources. Presentors will examine the major components of proposed changes in Social Security and how they are likely to affect older women and their families. Privatization and changes in retirement and computation years will be discussed.

Sponsored by the GSA Task Force on Women.

68

Identification of Longevity Assurance Genes

Chair: Anna McCormick

C. Epstein, University of California, San Francisco, "Potential Role of Superoxide Dismutase Modulators in Longevity"

Leonard Guarente, Massachusetts Institute of Technology, "Molecular Analysis of Aging"

Simon Klebanov, Jackson Laboratory, "Murine Chromosome Regions that Increase Maximum Life Spans"

The concept that genes regulate aging has a long history but not until recently has the prospect for identifying them and their functions been a plausible research objective. This symposium will focus on research in several laboratories that holds promise for elucidating mechanisms of aging through the cloning and identifications of genes associated with longevity or protection against processes that contribute to aging.

69

Leptin, Obesity and Aging: An Important Nexus?

Chair: Phillip Scarpace, University of Florida

John Morley, GRECC, VA Medical Center, St. Louis, " Leptin, Nitric Oxide and Aging"

Charles Mobbs, Mt. Sinai School of Medicine, New York, "The Leptin System and the Neuroendocrine Profile of Aging"

Phillip Scarpace, University of Florida, "Leptin Resistance with Age"

Barbara Horwitz, University of California, Davis, "The Leptin Regulatory Pathway: Is It Altered in Aging?"

Leptin is a gene product of adipocytes that serves as a satiety signal in feeding control centers within the hypothalamus. Its absence leads to increased adipocity and reduced energy expenditure in mice. Since increased adipocity and, possibly, reduced energy expenditure are hallmarks of aging in humans, the hypothesis has been raised that changes in leptin concentrations, activity or target-tissue response might contribute to these aspects of the aging phenotype. This symposium will be a forum for current research addressing this question.

70

A PORTFOLIO OF STRATEGIES TO TEACH THE CHANGING CONTEXT OF AGING TO NURSING STUDENTS

S.H. Kagan, University of Pennsylvania School of Nursing, 420 Guardian Drive, Philadelphia, PA 19104

Participants:

A.A. Chalian, R.M. Fairman, S.H. Kagan: (University of Pennsylvania Schools of Nursing and Medicine), Promoting Future Collaborative Practice

M.B. Happ, (University of Pennsylvania School of Nursing), Creating a Social Context for Gerontologic Nursing Practice

A. Iorianni-Cimbak, (University of Pennsylvania School of Nursing), Transforming Psychomotor

Learning into Critical Thinking for Care of Older Adults

J. Stankiewicz, (University of Pennsylvania School of Nursing). Promoting Clinical Judgement Through Autonomous Experiences and Self-Reflective Evaluation

Discussants:

J. Fairman, University of Pennsylvania School of Nursing

N.E. Strumpf, University of Pennsylvania School of Nursing

Garnering the intellectual energy of undergraduate nursing students to learn gerontological nursing presents a paradoxical challenge. Faculty must overcome disinterest and myths about older adults while meeting the increasingly acute need to prepare these future clinicians to care for older adults in a rapidly aging society. The symposium outlines a portfolio of successful strategies developed to teach gerontological nursing. The acutely ill older adult serves as a model illustrating physiologic, pathophysiologic, psychologic, and social concerns common to this and other vulnerable populations. A collaborative, feminist approach to restoration and rehabilitation undergirds and integrates philosophy of care, principles of gerontological care, and research-based practice. Discussion focuses on historical analysis and implications for practice change.

71

HELPING PATIENTS WITH OSTEOPOROSIS OPTIMIZE FUNCTION & QUALITY OF LIFE: AN INTERDISCIPLINARY APPROACH.

N. Morgenstern and R. Berg, University of Colorado Health Sciences Center, 4200 E. 9th Ave. Campus Box B-179, Denver, CO 80262.

Participants:

R. Berg, (School of Dentistry, University of Colorado Health Sciences Center, Denver, CO) Epidemiology and long-term outlook for elders with osteoporosis.

N. Morgenstern, (School of Medicine and Center on Aging, University of Colorado Health Sciences Center, Denver, CO) Risks for osteoporosis and preventive measures.

M. Ruscin, (School of Pharmacy, University of Colorado Health Sciences Center, Denver, CO) Managing medications for patients with osteoporosis.

D. Hersh, (Center on Aging, University Hospital, UCHSC, Denver, CO). Psychosocial considerations in osteoporosis management.

J. Astroth, (Center on Aging, University Hospital, UCHSC, Denver, CO). Orofacial complications in persons with osteoporosis.

J. Weis-Rodriguez, (School of Medicine, University of Colorado Health Sciences Center, Denver, CO) Physical therapy strategies for osteoporosis.

Discussant:

Osteoporosis is extremely common among older adults, frequently resulting in bone fractures with accompanying morbidity and mortality, as well as great economic and social cost. It is both preventable and treatable. Bone density testing can help establish the diagnosis and prognosis. Choice of estrogen-replacement therapy or alternatives must be based on balanced risks and benefits. Osteoporosis also negatively impacts dental health, specifically denture and dental implant success. Limited mobility may result in major life changes, with emotional and behavioral consequences. Physical therapy can teach safe movement, appropriate exercise, pain management techniques, and use of braces or supports. The broad context of care must be collaboratively integrated into patient management.

72

MAINTENANCE OF PHYSICAL ACTIVITY AFTER THE STUDY ENDS: ISSUES AND PROSPECTS FOR SUCCESS.

C. Hogue, University of North Carolina

Institute on Aging, University of North Carolina, Chapel Hill, NC 27599-1030.

Participants:

C. Hogue, (UNC-CH, IOA, Chapel Hill, NC 27599-1030) Skills, Gains, and Satisfaction Not Enough to Maintain Physical Activity After The Study.

A.M. Jette, M.E. Lachman (Roybal Center Consortium, Boston University, Boston, MA 02215) Home Exercise Training: What Happens When the Study Ends?

K. Williams, D.L. Gill (Dept of Exercise and Sport Science, UNC at Greensboro 27402) Home-based Balance and Mobility Interventions: How Much Is Enough?

W. H. Ettinger (Wake Forest University School of Medicine, Winston-Salem, NC 27157) Interventions to Enhance Long-term Compliance with a Physically Active Lifestyle among Chronically Ill Older People

Discussants

L. Branch (Duke University Center for the Study of Aging and Human Development, Durham NC 27710)

D. Buchner (Departments of Health Services and Medicine, University of Washington, Seattle, WA 98195

Health benefits of regular, moderate physical activity have been documented in many elderly community populations, including persons with chronic disease and relatively healthy but sedentary persons with poor strength and aerobic capacity. Several types of exercise interventions to increase strength, aerobic capacity, balance, flexibility and speed have been studied by randomized controlled trials. Although improvement in fitness at the conclusion of supervised training is frequently demonstrated in controlled studies, attrition tends to be high during training programs, and maintenance of regular physical activity after supervised training is abysmally poor across many studies.

In this symposium, investigators from geriatric medicine, physical therapy, exercise and sports science, nursing, and health psychology discuss the success of strategies to maintain physical activity after supervised training. The studies presented include home-based training, group training for samples with no reported chronic conditions; with physical impairment; and, in two studies, arthritis and other chronic illness. Suggestions for improving long term maintenance of physical activity will be discussed.

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GERIATRIC RESEARCH EDUCATION AND CLINICAL CENTER (GRECC) SYMPOSIUM III: FROM HOSPITAL TO LONG-TERM CARE - LESSONS LEARNED.

M. Conlin Shaw, Gainesville VAMC GRECC, Gainesville, FL.

Participants:

A. Mosley (Miami VAMC GRECC, Miami, FL) Effectiveness of a Research-Based Fall Prevention Program in a Hospital Setting.

S.A. Trudeau (Bedford VAMC GRECC, Bedford, MA) "Bright Eyes" - A Structured Sensory Experience for Persons with Advanced Alzheimer's Disease.

A. Hurley (Bedford VAMC GRECC, Bedford, MA) Differentiation of Agitation from Resistiveness to Care.

M. Conlin Shaw (Gainesville VAMC GRECC, Gainesville, FL) Abuse of Nursing Home Residents by Nursing Home Staff: Exploring the Dynamics.

Prevention programs in a hospital setting aimed towards preventing falls and/or pressure sores can be of major benefit if and when a patient enters an extended care facility (NH). Data show that the most common site for falls is at the bedside and the bathroom precipitated by activities such as walking or ambulating alone, climbing over a side rail and rolling out of bed during sleep.

Patients with advanced Alzheimer's Disease have been shown to benefit from a structured sensory treatment program. This therapeutic medium may represent meaningful activity that can be shared by caregivers and patients. Patients in NH can not only have problems with falls, pressure sores and dementia but also behavioral problems. These behavioral problems are oftentimes secondary symptoms of the underlying disease. Since interventions need to be targeted to the behavior's etiology, investigators have explicated two "disruptive" behaviors, agitation and reistiveness to care, and they have described interventions to manage successfully these two distinct problems. Patients with behavioral problems can result in abuse of nursing home residents by nursing home staff. These staff have been found to be both reactive and sadistic abusers. Interventions for staff focused on altering NH structural elements, decreasing stress, increasing self-esteem, and fostering relationships may help prevent staff from becoming reactive abusers.

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COMMUNICATION ABOUT DYING AND DEATH: NURSING HOME RESIDENT, FAMILY AND CAREGIVER PERSPECTIVES

A. Bower, Philadelphia Geriatric Center, 5301 Old York Road, Phila. PA 19141.

Participants:

A. Bower (Phila. Geriatric Ctr.) Nursing Home Residents' Talk About Dying and Death.

S. Moss, (Phila. Geriatric Ctr.) "I didn't know what to say": Family Members and Nursing Home Residents Communicate about Dying and Death.

M. Moss, (Phila. Geriatric Ctr.) "Family" as Metaphor in Staff Communication about Dying and Death.

R. Rubinstein, (Univ. Maryland, Baltimore Co., Dept. Soc. & Anthro., Baltimore, MD. 21250) Negotiating Nursing Home Dying and Death: Psychosocial Aspects.

Discussant:

J. Gubrium, (Univ. of Florida, Dept. of Sociology, Gainsville, FLA 32611)

Nursing homes are places of living and dying, but the reality of death in institutions is likely to be muted or distorted for a variety of reasons. The purpose of this symposium is to examine how nursing home residents, their relatives and their caregivers actually do communicate about dying and death in the nursing home. Based on ethnographic observation of both verbal and behavioral activities surrounding dying and death in two culturally and religiously distinct nursing homes (Jewish, Catholic), and on in-depth interviews with residents, family members and caregiving staff, this symposium will identify, compare and contrast themes in the communicative behavior (speech and actions) about dying and death characteristic of each of the three segments. These themes will be discussed within the cross-cultural context of the religious affiliations of the two nursing homes. (Supported by NIA Grant #R37-AG13993)

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HEALTH AND DISABILITY IN OLDER ADULTS: POLICY IMPLICATIONS OF LONGITUDINAL ANALYSES FROM THE HEALTH AND RETIREMENT STUDY.

Linda A. Wray, Institute for Social Research, University of Michigan, PO Box 1248, Ann Arbor, MI 48106-1248.

Participants

Eileen M. Crimmins & Mark D. Hayward (Andrus Gerontology Center, University of Southern California, Los Angeles, CA 90089-0191; & Population Research Institute, The Pennsylvania State University, University Park, PA 16802). The Earlier "Aging" of Poorer People: Mechansims Through Which Socioeconomic Status Affects Health.

Robert B. Wallace, Craig Zwerling, & A. Regula Herzog (School of Medicine, University of Iowa, Iowa City, IA 52242, & Institute for Social Research, University of Michigan, Ann Arbor, MI 48106). Health and Disability Among America's Older Workers: Results from the HRS.

Linda A. Wray (Institute for Social Research, University of Michigan, Ann Arbor, MI 48106-1248). The Role of Cognitive Functioning and Depressive Symptoms in the Transition Out of Paid Employment Among Older Workers.

This symposium presents three studies that examine the antecedents and consequences of health in a cohort of pre-retirement age adults, based on analyses of data from the first three waves of the new NIA-funded Health and Retirement Study (HRS). All three papers suggest that the pathways to disease, disability, and death in adulthood are not straightforward or easy to interpret. The complexity of the pathways raises potentially important questions about the timing and appropriateness of current or future public policy interventions.

In the first paper, Crimmins and Hayward investigate critical mechanisms through which lifetime socioeconomic status affects health in older adult years. In particular, they show how SES effects in childhood accumulate throughout the life cycle to either "speed up" or "slow down" the onset of disease, disability, and death later in life. Wallace and his colleagues then examine more closely the rates of disease and disability among older workers. They find that among workers reporting a disability in 1992, the rate of subsequent occupational injury was higher than among workers who were free of disability at baseline. Finally, Wray speculates on how changes in cognitive functioning and depressive symptoms--in addition to changes in physical health--might influence an older worker's decision to leave the workforce prior to the "early" and "traditional" ages of eligibility for Social Security benefits.

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THINKING ABOUT SURROGATE GRANDPARENTING: CUSTODIAL VARIATIONS

R.S. Goldberg-Glen, Widener University, Chester, PA 19013
B. Hayslip, Univ. of N. Texas, Denton, TX 76203
R.G. Sands, Univ. of Penn., Philadelphia, PA 19104

Participants:

B Hayslip, P. Silverthorn, C. Henderson, (Dept. Of Psych, Univ. of N. Tx, Denton, TX 76203) Determinants of Custodial Gradnparents' Perceptions of Problem Behaviors in Their Grandchildren.

E. Fuller Thomson, (Social Work, University of Toronto, Toronto, ON M5S 1A1) & M. Minkler, (School of Public Health, Univ. of CA, Berkely, CA). The Health of Grandparents Raising Their Grandchildren.

R.G. Sands, (School of Social Work, Univ. of Pennsylvania , Phil. PA 19104). Using a Microanalysis of a Videotaped Interview to Understand the Dynamics of a Grandparent-Headed Household.

R.S. Goldberg-Glen. (College of Human Service Professions, Widener Univ., Chester, PA 19013). Primary and Secondary Caregiving Grandparents: How Different Are They?

Discussants:

L. Burton, (Penn. State, Dept. of Human Development & Family Studies, Univ. Park, PA 16892).

J.S. Sainer, (Special Consultant, The Brookdale Foundation Group, NY, NY 19922).

Research on custodial grandparenting has become a growing interest of researchers within the field of gerontology. Although we are now developing literature in this area, there are still gaps in our understanding of the variations and dynamics of these "non-traditional" family systems. This symposium aims to enrich our understanding of grandparent kinship caregivers. Presentations will address: the health of custodial grandparents compared to non-custodial grandparents using data from the National Survey of Families and Households; determinants of custodial grandparents ratings of problem behaviors in their grandchildren, an ethnographic microanalysis of video-taped interview; and a comparison of secondary and primary caregiving grandparents. The symposium will conclude with a discussion addressing future questions for research and recommendations for policy and practice.

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FROM EFFICACY TO EFFECTIVENESS: MAKING THE TRANSITION IN DEMENTIA INTERVENTION RESEARCH

C. Camp Myers Res. Inst. of the Menorah Park Center for the Aging, Beachwood, OH 44122.

Participants:

S. Arkin (Univ. of Arizona, Dept. of Speech and Hearing Sciences, Tucson, AZ 85721) Student and Volunteer Application of Research-Based Alzheimer Interventions.

S. Orsulic & K. Judge (Myers Research Institute) Implementation of Montessori-Based Activities for Dementia by Long-Term Care and Adult Day Care Staff.

C. Farran, D. Lindeman, & D. Loukissa (Rush Univ. College of Nursing and Rush Alzheimer's Disease Center, Chicago, IL 60612) Caregiver Intervention Research: Where Have We Been? Where Are We Going?

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A. Sistler & C. Williams (Southern Univ. - Baton Rouge, Health Research Center and Dept. of Social Work, Baton Rouge, LA 70813) Supporting African American Caregivers Effectively.

M. Mittelman (Aging and Dementia Research Center, N.Y. Univ. Med. Center, NY, NY 10016) Selection of Outcomes to Demonstrate Effectiveness of Psychosocial Interventions for AD Caregivers.

Discussant: C. Camp (Myers Research Institute)

There is an increasing emphasis on demonstrating that intervention research can not only produce positive results (i.e., it is efficacious), but that clinically meaningful effects can be obtained in real-world contexts (i.e., it is effective). This emphasis is reflected in demands for demonstrating cost-effective treatments in managed care systems, and in priorities being set by federal funding agencies such as NIA and NIMH. Research projects in this symposium reflect this emphasis on ecologically valid interventions in the field of dementia care. Processes for transferring interventions into real-world contexts and into the hands on non-researchers, while maintaining results in everyday settings, will be highlighted.

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FUNDING SOURCES FOR RESEARCH ON OLDER WOMEN'S ISSUES. PART II: FOUNDATIONS

J. K. Rosenbach, JKR Associates, 4601 North Park Avenue, #1517, Chevy Chase, MD 20815.

Participants:

K. Davis (Commonwealth Fund, New York, NY 10021)

J. Feather (AARP Andrus Foundation, Washington, DC 20049)

M. Hennessy (Retirement Research Foundation, Chicago, IL 60631-4170)

S. Ritchie (Twentieth Century Fund, New York, NY 10021)

The need to increase the current supply of personnel engaged in aging research is well documented. The shortage cuts across all sections represented in the Society: the Biomedical Sciences, Clinical Medicine, Behavioral and Social Sciences, and Social Research, Policy, and Practice. These foundations have demonstrated their commitment to funding aging-related projects. They have also been a source of funding for research on women's issues. Since there is a recognized need to increase the research devoted to women's issues, participants will provide information, including the priorities of their respective foundations, application procedures, and eligibility guidelines.

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CRITICAL GERONTOLOGY: IMPLICATIONS FOR THEORY, RESEARCH AND PRACTICE

Larry J. Polivka, Florida Policy Exchange Center on Aging, 4202 E. Fowler Ave., #30437, Tampa, FL 33620.

Participants:

T.R. Cole, (Institute for Medical Humanities, Galveston, TX). Does the Humanist Tradition Contain Nourishment for the Frail Elderly?

C.L. Estes, (Institute for Health & Aging, University of California, San Francisco). Political Economy of Aging.

H.R. Moody, (Brookdale Center on Aging, New York, NY). Dialectical Gerontology & Critical Pedagogy.

L.J. Polivka, Critical Gerontology and Postmodernism.

Critical gerontology is a broad and diverse field of study which incorporates a wide array of theoretical perspectives; however, the work of critical gerontology is guided by three organizing principles which constitute what might be called the philosophy of critical gerontology.

1. Social behavior, though embedded in the physical world and bounded by structural realities, is not governed by immutable laws grounded in human nature, which can be discovered by the proper use of the scientific method. Research may reveal facts about social behavior, but these facts must be interpreted in order to give them meaning. The dialectical relationship between facts and interpretative meanings constitute the socially constructed world of day-to-day life.
2. The social facts that most critically affect the aging experience are derived from a structural analysis of socio-economic relations. This analysis is most fundamentally based on the concept of class, race and gender and their interrelationships. People grow old and experience aging differently, according, in substantial part, to the resources available to them throughout the life course, and race, class and gender are the major variables governing access to resources. The gerontologist's task is to interpret the impact of these variables and their interrelationships on the lives of older people, e.g., what does it mean to be black, female and working class in old age?
3. The interpretative process is substantially shaped (guided) by an ethical framework based on a mix of liberal and communal values—on a commitment to interpersonal obligation which is sufficient to ensure that whole categories of people are not excluded from the provision of resources needed to support an identity based on dignity and freedom. This consciously ethical framework for integrating analytical findings inevitably leads to identifying sources of oppression and developing public policies to ameliorate them.

It should be noted that this framework moves the interpretation and its focus on values in shaping our understanding of social life. The papers in this session will explore the possibilities of critical gerontology from the perspective of the social sciences and humanities.

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SHARED ETHNICITY AND RELATIONSHIP INTENSITY WITHIN INFORMAL NETWORKS OF RETIRED EUROPEAN AMERICAN MIGRANTS. E. Stoller, B. Miller, & S. Guo, Case Western Reserve University, Cleveland, OH 44106-7124.

The image of ethnicity emerging in recent research on European Americans emphasizes ethnic heritage as a basis of subjective identity. Although no longer firmly anchored in ethnic social structures, ethnic identity is also seen as a potential basis for generating solidarity and support among elderly European Americans. This research explores the impact of shared ethnicity in structuring the intensity of socioemotional relationships between elderly European Americans who migrated to Sunbelt retirement communities and members of their informal networks. Data were collected through interviews with a sample of retired Finnish Americans who retired to an ethnic enclave and a comparison sample of other European Americans who retired to the same city. Elders identified a mean of 8.6 network members, with a standard deviation of 5.1 and a range of 1 to 36. Hierarchical linear modeling was used to assess the impact characteristics of both elders (N=586) and network members (N=2,986) on relationship intensity. Our measure of intensity incorporated both socializing and provision of emotional support, with reciprocal emotional support reflecting a higher level of intensity than unidirectional support. The unconditional model revealed that 18% of the variation in intensity can be attributed to characteristics of elders and 82% to characteristics of helpers. More intense relationships were reported with family members and friends from the same ethnic background. Although there was no direct effect for elder's ethnic background, interaction terms indicated that the impact of shared ethnicity on the intensity of the relationship was higher for Jews and for Finnish Americans than for other European Americans.

CHANGE IN SOCIAL SUPPORT AMONG OLDER MEN: THE V.A. NORMATIVE AGING STUDY. D. F. Gilmer, C. M. Aldwin, D. Godfrey, A. Spiro III, R. Bossé. Dept. of Human & Community Development, University of California at Davis, Davis, CA 95616.

In cross-sectional studies, older people often report having fewer network members than younger people, but they also report receiving similar amounts of support (Antonucci & Akiyama, 1987). However, there have been surprisingly few long-term longitudinal studies of changes in social support in the elderly. We examined changes in both quantity (network size and frequency of interaction) and quality (perceived availability) of social support in three groups of men over a six year period. The sample consisted of men from the Normative Aging Study (NAS), aged 60-64 (n=278), 65-69 (n=183), and 70+ (n=138) who responded to surveys in 1985, 1988, and 1991. Repeated measures MANOVA indicated different patterns of change for quantitative vs. qualitative support. For quantitative support there were significant main effects for both age and time, with the oldest men reporting less support; support decreased equally over time for all three age groups. For qualitative support, the age difference was marginal (p<.07), with the oldest group tending to report slightly lower scores. The significant time effect revealed an increase in qualitative support at T2 but a decrease at T3 for all groups. This longitudinal study confirms previous cross-sectional findings on age differences in quantitative but not qualititative support.

POSITIVE AND NEGATIVE SOCIAL INFLUENCES ON PHYSICAL ACTIVITY IN OLDER ADULTS
M. Chogahara, S. O'Brien Cousins, The Department of Physical Education and Recreation, The University of Alberta, Edmonton, AB Canada T6G 2H9

The purpose of this study was to examine the relative impact of positive and negative social influences through social ties on physical activity in older adults. Special attention was directed at testing whether or not the effectiveness of positive influences and disruptiveness of negative influences on physical activity would be altered when their provision by family members, friends and health professionals were considered separately. In order to achieve this objective, a new scale was developed to jointly assess positive and negative influences and the sources who providing these influences, specific to physical activity in older adults. 479 questionnaire samples (*M*=73.8) that were collected at 51 senior groups in Edmonton were used for the analyses. Confirmatory factor analyses indicated that positive and negative influences were distinct domains, rather than being inversely correlated, across the family, friends and health professional categories. Regression analyses showed that although negative influences occurred less often than did positive influences, the negative influences were equally strong predictors on the physical activity level as the positive influences. Furthermore, the relative impact of positive and negative influences changed according to the source of these influences. The negative influences were found to be more pronounced in formal relationships, such as those with health professionals than in informal relationships, such as those with family and friends. This finding indicates that health professionals working with older adults need to constantly monitor their attitude toward aging and physical activity.

Personality as a Mediator of the Social Support – Well-Being Relationship in Older Adulthood. Toni L. Bisconti K. A. Wallace, & C. S. Bergeman. Department of Psychology, University of Notre Dame, Notre Dame, IN 46556.

The purpose of the present study is to understand how personality and social support combine to enhance successful aging in 179 independently functioning adults over the age of 65. It is hypothesized that possessing certain personality characteristics (e.g., more perceived control) may lead to the mobilization of an individual's support network, thereby creating a mechanism by which an older adult can be resilient in the face of the stressors related to the aging process. More specifically, personality is expected to mediate the relationship between social support and psychological well-being. This hypothesis was tested structural equation modeling. Social support consisted of the manifest variables friend support, family support, and perceived adequacy of support; extraversion, neuroticism and perceptions of control comprised personality; psychological well-being was created by positive affect, negative affect, and life satisfaction. Results of the model fitting yield a good fit (GFI = .95; AGFI = .90; NFI = .92), suggesting personality does mediate the relationship between social support and psychological well-being. That is, the predictive relationship between social support and well-being is nullified once personality is taken into account. It is concluded that support and various aspects of personality in isolation partially enhance successful aging, but in combination, these internal and external resources may foster the resilience necessary for a more complete adaptation to the possible detrimental effects of the aging process.

MARITAL STATUS AND SOCIAL CONTACTS AMONG THE ELDERLY: A TIME BUDGET PERSPECTIVE.

L. Okraku, Sociology Department, Saint Mary's University, Halifax NS Canada

Time budget methodology was used to examine the social contacts of the elderly, focusing on the married and the never-married. The technique allows us to go beyond frequency of contacts to analyze how much time is spent in these contacts on an average day. The data for the study come from 24-hour diaries of time use collected as part of Statistics Canada's 1992 General Social Survey. The national sample of 8996 included 1832 respondents aged 65 and over. For each diary entry, respondents recorded where and with whom they engaged in the activity. This study analyzes the duration of activities with spouse, children, other family members, friends, other persons, or alone. As expected, the married spent far more time in activities with their spouses than with any other social contacts; very little time was spent with children, despite research findings indicating frequent contact. By contrast, without spouse or children, much of the never-married's day is taken by activities done alone; friends and other family members seem to provide little compensation for lack of spouse. For the married, time with spouse increased with gender (male) and higher education; among the never-married, females and the better-educated spent more time with friends and less time alone. Time budgets present a useful tool for studying the activities and social interactions of the aged and need to be more fully exploited.

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CREATING A SOCIAL HMO OPTION UNDER MEDICARE + CHOICE

W. Leutz, Heller School,
Brandeis Univ., Waltham, MA 02254

Participants:

D. Kasle (Elderplan, Inc., 6323 Seventh Ave., Brooklyn NY 11220) Recommended Standards for Social HMOs under Medicare+Choice.

L. Gruenberg (LTC Data Institute 763 Massachusetts Ave., Cambridge, MA 02139) A Workable Approach to Disability-Based Payment for Social HMOs

L. Nonnenkamp (Kaiser Permanente Center for Health Research, 3800 N. Kaiser Center Drive, Portland, OR 97227) Social HMO Care Coordination Experience (1985-97).

T. Schwab (SCAN Health Plan, 3780 Kilroy Airport Way, Long Beach, CA 90806) Social HMO Long-Term Care Cost and Utilization Data (1985-97).

J. Capitman and W. Leutz (Heller School) Social HMO Long-Term Care Benefits: Member Satisfaction and Quality Assessments

The Social HMO creates benefits for home and community-based (HCB) long-term care services and integrates the delivery of these services with Medicare services through a prepaid, managed care approach. A demonstration of the Social HMO concept was mandated in the 1984 Deficit Reduction Act and reinforced and expanded by Acts of Congress in 1987, 1990, and 1993. The 1997 Balanced Budget Act states that "The Secretary of HHS shall submit to Congress by 1/1/99, a plan for the integration of health plans offered by Social HMOs...as an option under the Medicare+Choice program." This symposium presents standards for permanent Social HMOs recommended to HCFA by three original demonstration sites, supported by original research and performance data. An update on the status of the HCFA plan will also be presented.

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POLICIES ON AGING IN THE NEW MILLENNIUM: CHALLENGES AND OPPORTUNITIES

R.H. Binstock, School of Medicine, Case Western Reserve University, Cleveland, OH 44106.

Participants:

J. Quadagno (Pepper Institute on Aging and Public Policy, Florida State University, Tallahassee, FL 32306)

Challenges and Opportunities in Social Security Policy.

M. Moon (The Urban Institute, 2100 M St. NW, Washington, DC 20037) **Medicare in the New Millennium.**

J.M. Wiener (The Urban Institute, 2100 M St., NW, Washington, DC 20037) **Long-Term Care in the Future: Is This "As Good As It Gets"?**

R.H. Binstock (Case Western Reserve University, Cleveland) **Policies on Aging in the New Millennium: Issues of Political Feasibility.**

Discussant:

R.B. Hudson (School of Social Work, Boston University, Boston, MA 02215)

Anticipation of the Baby Boom cohort reaching the ranks of old age in the early decades of the next millennium poses substantial challenges to U.S. policymakers. Under current law, it is projected that the reserves in Social Security's Old Age and Survivors Insurance (OASI) Trust Fund will be fully depleted in 2029 and, thereafter, payroll taxes will only be sufficient to fund OASI benefits at about 77% of present levels. In 1996, spending on Medicare was 2.4% of gross domestic product (GDP); by 2030 it is expected to approximately triple, to 7.1% of GDP. Using 1990 as a baseline year, the Congressional Budget office has estimated that total national costs of long-term care will more than triple by 2030.

This symposium explores the challenges and opportunities involved in reforming Social Security, Medicare, and the long-term care arena, including consideration of what can be learned from experiences in other nations. It also examines the politics of aging and the broader political context in which such reforms may take place, in order to assess the feasibility of various types of reforms.

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OLD-AGE HOMES IN INDIA: TRENDS AND ISSUES

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Old-age homes (OAHs) in India are a small but growing trend in a nation of more than 75 million elders (age 60+) with a tradition of multigenerational households. A 4-month study of 48 OAHs via structured interviews of managers/trustees identified reasons for this growth (e.g., family inability to provide care). No longer just for destitutes, increases in for-pay homes and housing like CCRCs and assisted living reflect the needs of middle-class elders and their families. OAHs are small scale, concentrated in urban areas and the south, often with intergenerational aspects. Most are not "chains," are not regulated and do not receive national or state support, so rely on monetary and inkind gifts. Challenges include growing demand, need for more health services, questions about OAH appropriateness and lack of a national aging policy for a projected 120 million aged in 2040. Alternatives to OAHs (e.g., day care centers, Adopt-a-Granny programs) are discussed.

SMALL RESIDENTIAL HOMES: FAMILY CARE OR MINI INSTITUTION?

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Since 1993 small residential homes for 4 or less adults in Britain have had to be registered with local authorities under the Registered Homes (Amendment) Act 1991 consequently like childminding, adult placement and foster care, they provide an example of surrogate family care which is regulated by the state. Such homes now provide accommodation and care for 6,102 older people and whilst this is a very small proportion of the total residential population (c. 2%), it is one that is growing.

Currently community care policy within Britain asserts the basic philosophical principle that receiving care at home is better than in institutions. But is this the case? The authors draw upon material from both a pilot study in three authorities and an on-going national study of the quality of life of older people in small homes. In particular findings will be presented concerning the physical and social environments of care; the nature of the home as a small business and the impact of regulation. The authors will also comment on the similarities and differences between British small homes and American board and care homes.

WHO WILL CARE FOR ME?

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As individuals grow older, many plan for or seek assistance when disability or illness occurs. Research has shown that family, friends, or neighbours often provide older adults with essential informal care giving assistance. The purpose of this study was to investigate the informal care giving resources for people living in independent living units (ILUs) within an Australian retirement village setting. Over 320 residents residing in 25 religious based, non-profit ILUs were interviewed. The results demonstrated that even though residents had large family and friendship networks, they had limited informal care giving resources. In fact, residents indicated that they moved to the ILUs to secure both daily care assistance and long-term care accommodation as they were not confident in their informal care resources. However, the provision of these types of care may not available in non-profit ILUs. Thus, even though these older adults moved to the ILUs with the specific intent of securing care assistance, they may be at considerable risk of not receiving appropriate care giving assistance.

ON THE VARIETIES OF PERSON-ENVIRONMENT FIT THE CASE OF RELOCATION FROM HOME TO HOME

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Relocation of older adults is a major theme of gerontological research in general and within environmental gerontology in particular. Drawing from the latter perspective, we regard relocation from home to home predominantly as an active and goal-directed person-environment regulation process that follows a significant misfit between the person and his/her environment in the former living place. One facet of these person-environment dynamics is the motivation to move. Another facet is what really has changed after the relocation. Here, we differentiate conceptually between four dimensions as follows: (1) housing supply and equipment, (2) access of outdoor resources, (3) environmental stimulation, and (4) social integration. Thus the main research question of this work is to explore (1) what objective changes according to these dimensions are associated with relocation and (2) what relations do exist between motivations and objective alterations. Data based on standardized phone-interviews were drawn from a sample of 217 older adults (mean age = 70.7, range 60-89; 37.8% male and 62.2% female) who moved from home to home 1-3 years (M = 1.9, SD = 0.9) before assessment to/within a minor urban area in Germany. McNemar testing revealed that housing supply and equipment, access to outdoor resources, and environmental stimulation have significantly increased after relocation. Distance to family members decreased, whereas distance to friends increased. With respect to the relation between objective changes and individual relocation motivation no clear effect was found. By and large, this study underlines that relocation in old age could be interpreted not only as a stressful event but also as proactive behavior to optimize the person-environment fit. However, this process seems to be unrelated to subjective move motivations.

A FIVE-SITE INTERNATIONAL COMPARISON OF ALZHEIMER CARE SETTINGS BUILT ON THE 'WOODSIDE PLACE MODEL'.

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Distinctive features of five specially designed residential environments for persons with Alzheimer disease and related disorders were compared and related to outcome measures of resident care. All five centers: two in Canada, McConnell Place North and McConnell Place West, in Edmonton, Alberta; and three in the U.S., Asbury Place, Pittsburgh, PA; Marjorie Doyle Rockwell Center in Troy, NY; and Woodside Place in Oakmont, PA; exemplify the 'Woodside Place model'. Previous studies at individual centers found that the residents' problem behavior decreased and quality of life improved (e.g., Hoglund, DiMotta, Ledewitz and Saxton, 1994). However, these results are not particularly informative because the centers were compared to nursing homes which differed not only in their physical features but also in their staffing, residents, and programs. In the present study more definitive information was obtained by comparing sites that differ on fewer dimensions relevant to care outcome. Descriptive information was collected retrospectively from site records and from selected instruments. Outcome measures of resident care were collected through observation of behavior. A survey of staff, volunteers, and family members was conducted to determine their views on the degree to which the needs of the residents are being met. Preliminary data analyses relating characteristics of staffing, residents, and programs, as well as distinctive environmental features, to outcome measures of resident care and need, suggest that critical features covary with the outcome measures, as expected. Interestingly, the Woodside design appears to reduce wandering, a hallmark of the disease.

OUT-OF-POCKET HEALTH CARE COSTS AMONG ELDERLY MEDICARE BENEFICIARIES

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In an effort to curb the growth in Medicare costs, a number of recent proposals have advocated reforming the system by shifting costs back to beneficiaries (perhaps in the form of higher deductibles, co-payments, or premiums) or by replacing the system's guaranteed benefit with a defined contribution that limits the system's financial exposure. The merits of these reform proposals depend in part on the current distribution and burden of out-of-pocket health care costs for the elderly, about which little is known. In this paper we investigate the financial burden of health care costs among the elderly using data from the 1994 Current Medicare Beneficiary Survey (MCBS). By linking interview and administrative claims data for a nationally representative sample of beneficiaries, the MCBS provides an especially rich dataset to investigate elderly health care costs. We found that the elderly spent 23% of their income on health care costs in 1994, with almost one-half of their out-of-pocket expenditures going toward premiums for Medicare and supplemental insurance coverage. Financial burden was substantially higher among persons in poverty, in poor health, and over age 85. We also found that health care costs were especially burdensome for those who purchased Medigap plans or who received only traditional Medicare benefits, whereas the elderly in managed care plans paid relatively little out of pocket. Our findings raise questions about the equity of Medicare reforms that are designed to shift more costs on to beneficiaries.

Financial Barriers to Care and Out-of-Pocket Spending by Disabled Medicare Beneficiaries.

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The demographic characteristics of disabled Medicare beneficiaries are different from those of beneficiaries who qualify for Medicare at age 65. As a group, disabled beneficiaries are in poorer health and have fewer financial resources than their elderly counterparts. This paper uses data from the 1995 Medicare Current Beneficiary Survey (MCBS) to present a profile of disabled Medicare beneficiaries and to examine their access to and satisfaction with care. It also presents, for the first time, estimates of disabled beneficiaries' out-of-pocket spending on health care in 1997 by type of insurance coverage. These estimates come from the Medicare Benefits Simulation model, which was developed for AARP by the Lewin Group using data from the 1993 MCBS Cost & Use files. The findings indicate that the 35% of disabled Medicare beneficiaries enrolled in Medicaid have relatively low out-of-pocket spending. However, the high proportion of disabled beneficiaries (29%) who lack any public or private supplemental coverage face a substantial financial burden, as do those with low incomes who pay out-of-pocket for private insurance. The results underscore the critical role that Medicaid plays in protecting many disabled Medicare beneficiaries, and the inadequacy of the safety net for many other poor beneficiaries. Special attention will be given to discussing the policy implications of these findings.

Residential Care Case Mix-A Method for the Future

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Social and fiscal policy in Maine's long term care system has focused on providing alternatives to nursing home care for elders since the early 1990's. This policy direction has led to the development of many variations of assisted living, including the development of both case mix reimbursement and quality indicators for publicity funded residential care beds. A modified MDS 2.0 assessment tool (MDS-RCA: minimum data residential care assessment) was developed and tested with consumers of residential care. A modified RUG (Resource Utilization Group) payment system which recognizes cognitive, behavioral, and assistance with activities of daily living. This classification system "RES-RUG" was developed to identify specific needs of residential care consumers.

In addition, 24 Quality Indicators were developed from Zimmerman's (1995) Nursing Home Quality Indicators. These indicators are being used by providers in their quality improvement programs.

The indicators were categorized into groups for peer group comparison. The peer groups include elderly, cognitive, behavioral, mixed, and "other" population. These peer groups give residential care staff the ability to compare their quality indicators with other providers serving the same primary population. Data will be presented focusing on the development of payment groups and one year changes in the quality indicators.

AN ANALYSIS OF POSTACUTE TREATMENT AND OUTCOME DIFFERENCES BETWEEN MEDICARE FFS BENEFICIARIES AND MEDICARE MCO ENROLLEES IN SOUTHERN CALIFORNIA.

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The Southern California region is at the forefront of Medicare managed care penetration. The present study uses SNF-based therapy services provider data to compare FFS beneficiaries to MCO enrollees in characteristics at admission, treatment characteristics and characteristics at discharge. FFS (N=240) and MCO (N=276) postacute patients had similar functional disability levels at admission as measured by the Rehabilitation Outcome Measure (ROM). FFS beneficiaries scored worse on the Deyo-Charlson Comorbidity Index. MCO enrollees received significantly fewer units of physical, occupational and speech therapy and experienced significantly shorter lengths of stay in the SNF and in each rehabilitation program. MCO enrollees were more likely to be discharged home than FFS beneficiaries who were more likely to be re-hospitalized from the SNF. The two payment source groups did not differ significantly in functional disability outcomes at discharge. Predicted probability analysis illustrated the selection effect caused by MCO utilization review – those MCO patients who received therapy units did so because they continued to show improvement. The results have implications for understanding the growth of Medicare managed care and the environment in which SNF prospective payment will be implemented.

OREGON'S EXCEPTIONAL NEEDS CARE COORDINATORS: A CONSUMER PROTECTION FOR MEDICAID MANAGED CARE

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States face many challenges enrolling the SSI population in managed care, and policy makers, advocates, providers and health plans have concerns about meeting the needs of disabled and elderly Medicaid beneficiaries. To allay these concerns, Oregon developed the Exceptional Needs Care Coordinator (ENCC), a unique staffing requirement for participating managed care plans. The ENCC role is to first help ensure continuity of care during the fee-for-service to managed care transition, and then to help coordinate the wide array of services often needed by this population. Although the State mandates that all plans provide for their disabled and elderly enrollees, the ENCC staff themselves are plan employees, raising concerns about potential conflict of interest.

As part of HER's ongoing evaluation of this 1115 waiver program (funded by HCFA and ASPE), we interviewed state policy makers and administrators, ENCCs, health plan administrators, consumers, advocates, providers, and case workers in the aging and disability services community, about the ENCC function. We found is wide variation in the range of tasks ENCCs perform, staffing at the plans, and perceived effectiveness. ENCCs serve as advocates within the plans, liaisons between the plans and community agencies, and/or in utilization review or high cost case managers. Plans also vary in their approaches to case finding. While we encountered creative approaches to medical case management and examples of effective advocacy, it appears that the ENCC role is underutilized and often unfamiliar to consumers and providers. Oregon's willingness to experiment with various models provides valuable information for other states as they develop consumer protections for their Medicaid managed care programs.

CRITIQUE OF THE NHC-BASED CAPITATION MODEL: THE CONCEPT OF MEDICAL VULNERABILITY

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The high Medicare costs of frail elders compared to other elderly provides the underpinning for the Nursing Home Certifiable (NHC) model used in the Social/HMO and the Program for All-inclusive Care for Elderly (PACE). However, planners are increasingly realizing the inadequacy of the NHC model as the basis for Medicare capitation payments to specialized programs focusing on frail elderly. This paper introduces a new concept - "medical vulnerability" - to demonstrate limitations of the NHC based payment method. Medical vulnerability is defined as the expected value of future Medicare costs, measured in relation to average local Medicare costs. A regression based model was developed using the 1993 Current Medicare Beneficiary Survey (MCBS) to predict 1994 Medicare costs, which was then used to create a vulnerability index consisting of 5 categories – low, very low, moderate, high, and very high to assess the relationship between Medicare costs and NHC status. Results show that within the NHC population there is considerable variability in Medicare costs. More than half of all NHC's has expected costs in the upper five percentiles of all Medicare recipients. Another one-third has expected costs in the upper quartile, but outside of the upper five percentiles. The remaining persons, about

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one-eighth of total recipients, have more moderate levels of expected Medicare expenditures. The expected costs of non-NHC's show that the NHC status does not account for a significant part of the overall variability in expected Medicare costs since there is a proportion of non-NHC persons in the upper quartile of expected Medicare costs. The high expected costs of the non-NHC persons is of considerable concern since, numerically, there are more of such non-NHC persons than there are NHC's who are very high cost. The paper also demonstrates that medical vulnerability has a considerable influence on the risk of nursing home placement. The variability in expected Medicare costs among both the NHC and the non-NHC populations suggest the need for case-mix adjustments that address differences in health status in both these populations. The paper also examines the relationship between medical vulnerability and NHC status among the dually eligible population.

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MAKING FRIENDS IN ASSISTED LIVING. M. Teaford, S. Zavotka, School of Allied Medical Professions and College of Human Ecology, The Ohio State University, Columbus, Oh 43210.

Lifelong patterns of friendships and social interaction are often disrupted by a residential move (Johnson and Troll, 1994). But it can provide opportunities to make new friends (Baum and Baum, 1980). Stacey-Konnert and Pynoos (1992) found that the majority of residents in a retirement community relied upon other residents for regular social activity. Regnier et. al. (1995) suggest that common areas of assisted living facilities can be used by residents for socialization, to make new friends, and to maintain contact with friends living outside. Central Ohio older adults (n = 101, mean age = 81.5 years) living in assisted living facilities and in senior high rises with services were asked about family, friends, health, life satisfaction, and use of common areas. Visiting at meals was the most frequent social activity for all residents (3 hours a day). Residents reported spending an average of an additional 2.5 hours a day outside their apartments, yet 16.8% spent no time outside of their apartments except for meals. Those who spent less time outside their apartments were significantly more likely to report declining health ($r = -.329$, $p > .002$) or to be long-time residents ($r = -.202$, $p > .04$); loneliness was not a factor. Study has implications for design of common areas. More research is needed on the loss of friendships and ability to make new friends after a move.

FROM HERE TO ETERNITY: COPING THROUGH RELIGIOUS PRACTICES IN ASSISTED LIVING FACILITIES

Vickie L. Patterson, Mary M. Ball, Frank J. Whittington, Molly M. Perkins, Gerontology Center, Georgia State University, University Plaza, Atlanta, GA 30303.

Assisted Living Facilities (ALFs) offer a level of care between independent living and nursing homes. Recently researchers have begun to explore quality-of-life issues concerning residents of ALFs. Considerable research suggests that religiosity is positively associated with both emotional and physical health. The present research examines how residents use religious practices to cope with the challenges of life in ALFs. Qualitative analysis of in-person interview data from 71 residents of ALFs revealed a variety of religious practices, such as prayer, church attendance, and Bible reading. Most residents deemed religion important and reported that religious practices provided a framework for coping with problems. Coping ranged from the mundane (e.g., attending a gospel concert to offset the otherwise dull routine of the home) to the transcendent (e.g., enlisting the support of an omnipotent ally in the face of adversity). Recommendations for enhancing the quality and variety of religious activities within ALFs are offered.

MAINTAINING SELF-IDENTITY AND COMBATTING SOCIAL MARGINALITY AMONG RESIDENTS OF ASSISTED LIVING FACILITIES: THE ROLE OF PROVIDERS

Sharon V. King, Mary M. Ball, Vickie L. Patterson, Molly M. Perkins, Frank J. Whittington, Department of Sociology, Georgia State University, Atlanta, GA 30303

Research shows that preservation of self-identity and self-esteem is a challenge for residents of assisted living facilities. This study focuses on the perspectives of providers and the strategies employed to respond to assisted living facility residents' needs for self-identity maintenance and esteem-building. Qualitative data from semistructured interviews with providers and residents of 28 assisted living facilities in 3 metro-Atlanta counties were analyzed using the grounded theory approach. These data show that the lack of institutional distance between providers and residents in assisted living facilities allows staff to engage in a variety of strategies that minimize the social marginality of these facilities and enhance residents' sense of identity and self-esteem. Several of these strategies draw on basic human relations principles, are replicable, and require a minimum of staff time and energy.

INDEPENDENCE AND AUTONOMY IN ASSISTED LIVING: WHAT RESIDENTS WANT, WHAT FACILITIES PROVIDE.

Mary M. Ball, Molly M. Perkins, Frank J. Whittington, Vickie L. Patterson, & Sharon V. King, Gerontology Center, Georgia State University, Atlanta, GA 30303

Maintaining independence and autonomy--to the degree possible--remains central to the quality of life of older persons with disabling chronic conditions. While achieving independence and autonomy in group long-term care settings is indeed challenging, assisted living facilities (ALFs) frequently claim to promote these values. Qualitative data from interviews with 71 residents in 28 ALFs in Georgia demonstrate that residents with significant disability find keen satisfaction in carrying out and controlling even the smallest daily living tasks. These data also show that, while many providers understand residents' need for independence and autonomy, they do not always choose strategies to achieve these goals that are compatible with residents' preferences and needs. Autonomy for many residents means control as well as choice of options and decision-making consistent with personal identity and values over time. Key to conceptualizing independence and autonomy in these settings is recognizing that meaningful autonomy can be achieved, even when independence cannot.

RESIDENTS' AND FAMILY MEMBERS' EXPECTATIONS AND SATISFACTION IN ASSISTED LIVING

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Studies of resident and family satisfaction with assisted living are rare, even though assisted living is the fastest growing segment of long-term care. Being market-driven and largely private-pay, however, the industry can not afford to overlook customer satisfaction.

Within a week of admission to a newly established assisted living residence, baseline data concerning expectations were collected from 82 pairs of residents and close family members. Posttest data concerning their experiences and satisfaction were collected four months later. Significant declines were found for both residents and families when comparing their baseline expectations and posttest experiences on an 18-item scale. Also at posttest, satisfaction, as measured by a 12-item scale, was significantly lower for residents than their family members. As has been seen in studies of patient satisfaction with medical care, it appears that unrealistic expectations may result in subsequent dissatisfaction. *(Supported by a grant from the Retirement Research Foundation.)*

TRACKING THE COST OF ASSISTED LIVING: THE INITIAL EXPERIENCE OF COST REPORTING IN NORTH CAROLINA

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This study, a project of the Public Policy Institute of AARP and the Duke LTC Care Resources Program, uses the first 3 waves of data from a legislatively-mandated cost reporting process in North Carolina to track the emerging costs of providing assisted living to a large population of publicly-supported (SSI supplement and Medicaid) residents. In 1995, legislation in North Carolina defined assisted living statutorily and mandated that the category of assisted living serving the largest number of residents (adult care homes which overall provide care to 20,000+ residents) file audited cost reports if they are serving residents supported by public funds. The costs analyzed in the study include those related to personal care, dietary, and property. The initial experience is of interest nationally for both the information provided about the emerging costs of assisted living for low and modest income individuals and the description of the process of bringing hundreds of homes into an audited cost reporting process.

AGING IN PLACE: PATTERNS OF DISCHARGE IN ASSISTED LIVING FACILITIES

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The Oregon assisted living (AL) philosophy supports aging in place but evidence of the dynamics are not well reported. Death in an AL can be a desired and desirable outcome, but only if needed services are offered and the death is unavoidable. This paper examines aging in place with 2 data sets.

First, we determine if aging in place occurs as functioning declines. The sample is 605 randomly selected AL residents from 38 ALs enrolled in a 3-wave longitudinal evaluation of AL in Oregon funded by the Robert Wood Johnson Foundation. During the course of a year, 34% of the study participants left their baseline AL through relocation or death. At twelve months, 15% were in other LTC settings (i.e., nursing facilities(5%), adult foster homes (2%) residential care facilities (1%) other ALF',(1%)); living in the community (3%); or had moved out of state (3%). Nineteen percent of the study participants were deceased, and about one third of these moved prior to their death. The analysis will examine differences in functioning between those who moved and those who did not; reason for moving; service patterns for those who died in the AL; factors related to moves prior to death; and the phenomena of multiple moves after leaving the AL.

Second, this longitudinal study will be triangulated with a discharge study of those who died or left 42 ALs over a 6 month period. A discharge rate was created at the AL level and AL characteristics (e.g. size, rurality, case mix, length or time in business, ownership) correlated with discharge rate.

The results suggest that while the majority of people do remain in ALF's, a significant number of frail elderly move to other LTC settings. An understanding of these complex mobility patterns is important in meeting long term care needs of frail elderly.

SUPPORTIVE HOUSING: COMBINING HOUSING AND CARE FOR OLDER ADULTS.

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Alternative approaches to the provision of housing and services to older adults are receiving increased attention. Supportive housing is a community-care option which emphasizes independence while providing personal care and safe, secure, home-like environments.

This study focuses on two supportive housing sites in Winnipeg, Canada. Data are from a series of interviews with tenants, their family caregivers, staff, and program planners/policy-makers.

Attention focuses on the relative stability in tenants' cognitive/physical functioning, changes in the type of care provided by their family caregivers, and changes in the volume/type of Home Care services received. Advantages and disadvantages from various perspectives are highlighted. Issues such as the identification of appropriate tenants, and the development/implementation of criteria to determine when a move from supportive housing is necessary are examined. Implications for future policy and research are considered.

HOME CARE SUITES: EVALUATION OF AN ALTERNATIVE RESIDENTAL CARE OPTION.

R. M. Mathews (Gerontology Center, University of Kansas);
P. Xaverius (Gerontology Center, University of Kansas);
K. Kosloski (Department of Gerontology, University of Nebraska at Omaha); and
D. Altus (Gerontology Center, University of Kansas.

Family members often serve as primary caregivers for frail and disabled elders. However, the lack of accessible space in the family home often makes this option difficult or unsafe. Further, over-crowding and reduced privacy are frequently a concern of both elders and their potential caregivers. This poster will summarize the findings of a four-year project, funded as an SBIR project by the National Institute on Aging, that evaluated the impact of elder cottage housing alternatives on older adults and their caregivers. This study was conducted as a collaboration between private-sector housing providers and university-based researchers. Multiple approaches to providing accessible, affordable, safe, and private housing for frail and disabled elders in close proximity to family caregivers will be described. Impacts of these interventions on both users and control group elders and caregivers will be summarized. Public policy implications will also be discussed.

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THE INFORMATIONAL NEEDS OF FAMILY MEMBERS OF COGNITIVELY IMPAIRED RELATIVES RESIDING IN NURSING HOMES. D Schur, L Noelker, W Looman & K. Bensing. The Benjamin Rose Institute, Cleveland, OH 44114-3301.

The placement of a cognitively impaired elderly relative into an institutional setting is an intense emotional experience. A family member relinquishes the daily hands on tasks, but, in turn, experiences feelings of guilt, anxiety, loss of control, and powerlessness over the quality and quantity of care a relative receives within the nursing home environment. The family member becomes the "forgotten client." He or she receives a tour of the facility but rarely receives a formal orientation to the realities of life in a nursing home or provided with instructions in coping strategies to help deal with the emotional aspects of having an institutionalized relative.

In this research, cross sectional survey data were obtained from interviews with 133 family members of cognitively impaired relatives and the 114 nursing assistants who cared for them at 5 suburban nursing homes in Greater Cleveland. Analysis of both quantitative and qualitative data revealed 5 areas which family members regarded as problematic. First, visiting their cognitively impaired relative was an emotionally draining experience. Second, family members were unfamiliar with the specific duties nursing assistants performed for the residents. Third, they were frustrated by their inability to determine the appropriate staff member to approach when questions arose. Fourth, family members experienced communication problems when interacting with both staff and management of the facility. Lastly, they needed problem-solving techniques to satisfactorily resolve issues concerning their relative's care.

Educational brochures were developed to assist the family members' adjustment after they placed their cognitively impaired relative in a nursing home. The specific problems faced by the family members in each of the 5 areas and the strategies offered in these brochures will be presented.

FAMILY MEMBERS' PERCEPTIONS OF NURSE ASSISTANTS: MORE POSITIVE THAN NURSE ASSISTANTS THINK. W.J. Looman, L.S. Noelker, D. Schur, C.J. Whitlatch, F.K. Ejaz. The Benjamin Rose Institute, Cleveland, OH 44114.

The literature on nursing home care contains a multitude of articles about the shortcomings of nurse assistants (NAs) but few have focused on positive perceptions of NAs. This presentation compares the perceptions of residents' family members with how NAs think they are perceived by families. The research results reported in this presentation come from interviews with 133 family members of cognitively impaired residents and 114 NAs who cared for them in five nursing facilities in greater Cleveland, OH. Family members were mostly adult children (67%), female (70%), and white (84%). NAs were predominantly female (89%), white (60%), with a mean age of 33, who had been caring for cognitively impaired nursing home residents for an average of five years.

After controlling for any organizational differences among the nursing homes, family members' perceptions about NAs were significantly more positive than NAs had thought in five areas: 1) that NAs are sensitive to residents' feelings, 2) that NAs are not abusive to residents, 3) the importance of permanent assignment of NAs to residents, 4) awareness that NAs provide most of the hands-on care residents receive, and 5) family members' understanding of the NA job. The presentation includes discussion of materials developed to inform both families and NAs and to enhance communication with and understanding of one another. Suggestions are offered for in-services for NAs and educational sessions for residents' family members.

THE FORCED RELOCATION OF NURSING HOME RESIDENTS AND PROACTIVE POLICY IMPLICATIONS. P. B. Teaster, K. A. Roberto, Center for Gerontology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0426, M.C. Miller, VA Association of Area Agencies on Aging, Richmond, VA 23219.

A sixty bed nursing home lost its Medicaid certification after a licensing visit by the State

Health Department. This study is an examination of the effects of relocation on residents receiving Medicaid who who moved from a facility as well as those residents who stayed. Data were gathered using the Minimum Data Set administered at three month intervals: prior to the move, at the time of the move, and after the move. Another component of the study was a telephone survey of the responsible party of the Medicaid recipients regarding effectiveness of the local long-term care ombudsman in assisting with relocation. Lastly, a national survey was conducted to determine those states having protocols for a forced relocation and to discover those states with innovative procedures for such a move.

BEST PRACTICES FOR NURSING HOMES: CHANGING CONTEXTS OF INFORMATION DISSEMINATION.

J. Owens & M.B. Neal, Institute on Aging, Portland State University, P.O. Box 751, Portland, OR 97207-0751.

This poster session will report on the results of a grant-funded demonstration project to enhance access to best practices information for Oregon nursing homes. Ten pilot homes, half of which are in rural areas, were provided with Internet access for a year and with training to find best practices information on the World Wide Web. Additionally, a web site was created for the project to disseminate up-to-date information as it became available. An Internet discussion group was also set up to provide a forum for information dissemination and for communicating with peers statewide to discuss best practices issues. Although only ten pilot homes were provided with free Internet access, all Oregon nursing homes were encouraged to participate.

The results include discoveries about the need for intensive personal networking on a non-virtual basis in order to gain the critical mass of participants needed to ensure that a virtual discussion will take place and that it will become self-sustaining. Also, there is a need for ongoing training to assure continued participation in the network and discussion group.

A Mindfulness Based Stress Reduction Program For Nursing Home Residents

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Elderly nursing home residents face many challenges including chronic pain, stress from multiple losses and coping with institutional life. Traditional modalities rely on medications which may not completely resolve the distress and often have undesirable side effects. Alternate methods may offer symptom relief and enhance the quality of life for the resident, however, these programs are often not offered to the frail elderly.

An eight week therapy program for chronic pain, anxiety and distress, modeled on the Mindfulness Based Stress Reduction Program at the UMass Medical Center, was introduced into a 514-bed academic nursing home. Group members practiced breathing exercises, meditation, visualization and guided imagery. Music and aromatherapy were also utilized to provide a calming milieu. Members were provided with relaxation tapes and encouraged to use these daily as well as practice yoga and breathing.

Early outcomes include expressions of satisfaction and well being among participants. An increase in body awareness and sensitivity to physical responses to stress were reported by group members. In addition, staff engagement in the program and techniques has been high, with use of the techniques in many aspects of daily care delivery. A mindfulness based approach appears beneficial for both nursing home residents and staff.

PERSONAL PERCEPTIONS OF AGING: A QUALITATIVE STUDY OF "QUALITY OF LIFE" ISSUES IN LONG-TERM CARE FACILITIES

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Most research on successful aging and perceived "quality of life" in later adulthood has focused on supporting or refuting existing theories regarding late-life adjustment. Using a qualitative study approach, this study used a broad, semi-structured interview to assess long-term care facility residents' perceptions of aging and adjustment. The aim of the study was to identify recurring themes from the interview regarding social, behavioral and/or psychological factors important to late-life adjustment with personal aging and/or living in a long-term care facility. Qualitative analysis of the data (n = 7 residents from 2 different locations) suggested that the following were important factors: (1) reaction to loss: autonomy, decision-making power, health, attractiveness, and special "others"; (2) fear: abandonment and memory loss; (3) perceived loneliness: self- and other-imposed; (4) ability to live in the "here and now"; (5) present life circumstances: aging and daily care; and (6) general life-review outcomes. This research supported by a pre- and post-doctoral traineeship grant from NIA# T32 AG00220.

Dynamic Not Static: Caregivers' Relationships with Long-Term Nursing Home Residents

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What are caregivers' experiences, attitudes and feelings when their relative is in a nursing home over an extended period of time? Fifty-four caregivers of relatives placed in three New York area nursing homes for one year or more were the subjects of the last phase of this qualitative/quantitative study. Face to face and phone interviews were conducted using an instrument with structured and open-ended questions. The caregivers mean age was 62, over 80% were women. Their relatives average nursing home length of stay was over 3 years. The relationship of caregivers to their relative was dynamic, not static: many found the pattern of their visits had changed over time. Over 70% of the caregivers reported their feelings toward their relative were different (although still strong) compared with the first year of placement. Caregivers (91%) found their relationship with the nursing home staff is at least adequate, but felt the emphasis is on the physical needs of the resident. Many caregiver/relatives experienced feeling isolated and stigmatized, often perceiving themselves as invisible in the family, in the community, and in the nursing home. There is a need to further evaluate, then craft more responsive interventions to help family members of nursing home residents, not just for the first year but beyond.

BARRIERS TO EFFECTIVE COMMUNICATION BETWEEN CLINICIANS AND NURSING HOME STAFF

J. Young, D.R. Longo, D.R.Mehr, E. Lindbloom,
Department of Family and Community Medicine, University of Missouri-Columbia, Columbia, MO 65212.

Providing quality care to ill nursing home residents requires timely and accurate communication between nursing home staff and the responsible clinician. Using qualitative techniques, we sought to identify barriers to effective communication concerning acute illness episodes. We taped in-depth semi-structured interviews of residents (family if the resident was demented), staff nurses, and the physicians or nurse practitioners responsible for treatment decisions in each episode. Content analysis of interview transcripts revealed several types of impediments to effective communication: 1) failure of communication medium (e.g., undelivered phone message); 2) evening or weekend illness onset with difficulty contacting an on-call physician; 3) busy professionals interacting only through an intermediary; 4) inappropriate or inaccurate information communicated; 5) inadequate information transfer between nurses on different shifts; and 6) prior relationship between staff nurse and clinician. In one instance, a nurse's reluctance to talk with a physician perceived as being difficult led to inadequate communication of resident condition. Understanding these potential barriers to communication by both nursing home staff and clinicians who treat nursing home residents is essential to improving care for acute illness episodes and to improving treatment outcomes.

THE RELATIONSHIP BETWEEN FAMILIES AND STAFF CARING FOR RESIDENTS WITH DEMENTIA IN LONG-TERM CARE FACILITIES.

James Gladstone, Ph.D., McMaster University, School of Social Work, KTH-319, 1280 Main St W. Hamilton, Ontario L8S 4M4 and Evelyn Wexler, M.Sc.N.

Little is known about the relationships that develop between family members and formal caregivers in long-term care (LTC) facilities. The objective of this qualitative study was to (1) investigate ways that families and staff in LTC facilities negotiate relationships with one another and (2) identify factors that contribute to stronger and weaker relationships. This presentation focuses on these relationships, as perceived by staff. (Our previous presentation examined relationships as perceived by families.) Data were gathered through participant observation in 2 special care units as well as through detailed interviews with 42 staff who work in the LTC facilities that house these units. A content analysis of field notes and interviews showed that relationships are negotiated differently by registered nurses, nursing aides, and activation specialists. Findings showed that staff employ various strategies that shape their relationships with families, depending on whether families are perceived to be critical or accepting of staff, to feel guilty or relaxed about placement, and whether they are perceived to have "realistic" or "unrealistic" expectations around care. Factors that influence the development of positive relationships include open communication with families around the care of residents, recognition of staff expertise and accomplishments, understanding of work stress experienced by staff, and family involvement. Data suggest that the development of family-staff relationships needs to be viewed as an interpretive process and placed in a systemic context.

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Labour of Love: Five Stories of Caregiving

One (44 minute)/color videotape/1998
Produced by Adam Symansky for the National Film Board of Canada

The numbers are staggering. Over 25 million North Americans are currently looking after elderly relatives with health problems.

Shot over an entire year, ***Labour of Love*** shows the human side of caregiving--the loving bonds, the frustrations and heartaches, the mundane tasks and the constant fatigue.

Labour of Love includes five intimate profiles of caregivers and their families. This special video takes us to the heart of what it means to be a caregiver, offering hope for everyone who is caring for a family member.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

Elder Parent Care: The Family Meeting

One (30 minute)/color videotape/1996
Produced by Northwest Media, Inc.

This well done video teaches families caring for an elderly parent how to work together to develop a shared caregiving plan. It takes an in-depth look at how one typical family comes together to assess its elder parents' needs.

Faced with obstacles that beset most families, the family's goal is to develop a plan the whole family, including elders, can support. Following a five-step decision making process, the family learns how to gather information, formulate and evaluate options and create and act on a plan. Viewers guide included.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643; 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

Daughter of the Bride

One (29 minute)/color videotape/1997
Produced by Terri Randall

With many older adults outliving spouses and thriving well into their seventies, second and third marriages are becoming more and more common. But when an older parent remarries, it can take an emotional toll on the adult children. *Daughter of the Bride* is a sensitive look at how one family deals with complex and ambivalent feelings when their 66 year old recently widowed mother falls in love again and remarries – all within a year of her husband's death. A very engaging video.

(Nominated for a 1998 Academy Award, Documentary short category)

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643; 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

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The Economics of Aging Formal Interest Group Symposium: Will Wealth at Retirement Support Retirement Needs?
M. Honig, Hunter College, New York, NY, organizer

Seven out of ten working adults in the U.S. report that they are worried about not having enough private savings for their own retirement. According to a number of recent polls, more than half say they are either not saving for retirement at all (31%) or are saving inadequately (26%). Surprisingly, these figures are almost identical for those who are closest to retirement.

This symposium, directed to a wide audience within the GSA, focuses on several critical questions regarding the retirement savings crisis: How inadequate are the savings of pre- retirement Americans? What factors explain these savings shortfalls? Can we learn anything from retirement planning aids? Do older workers actually know how much they will receive from their employer pensions? Session participants include not only academic researchers but also representatives from a number of governmental agencies and private organizations directly concerned with the financial well-being of the older population.

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AGING WITH DEVELOPMENTAL DISABILITIES IN THE 21^{ST} CENTURY: ADVANCES IN UNDERSTANDING HEALTH AND FUNCTIONING
A.R. Factor, Rehabilitation Research and Training Center on Aging with Mental Retardation, University of Illinois at Chicago, 1640 W. Roosevelt Rd., Chicago, IL 60608-6904
Participants:

J. Hamel & T. Heller (RRTC on Aging with Mental Retardation, University of Illinois at Chicago, Chicago, IL 60608-6904) Assistive Technology Screening and Use Outcomes by People with Developmental Disabilities as They Age.

M. Janicki (New York State Office of Mental Retardation and Developmental Disabilities, Albany, NY 12229-1000) World Health Organization Research Initiative on Aging with a Developmental Disability.

A. Factor & R. Hemp (RRTC on Aging with Mental Retardation, Chicago, IL 60608-6904); R. Berkobien (The Arc, Arlington, TX 76010) The New Frontier of Managed Care: States' Initiatives for Older People with Developmental Disabilities.

Life expectancy is increasing for people with developmental disabilities as well as for the general population. Over the next thirty years, as the large post-World War II baby boom generation enters old age, the number of older adults with developmental disabilities will increase substantially and they will be living longer. Professionals in gerontology, developmental disabilities, and health care are already experiencing a growing demand for interventions and supports that meet this population's special needs. This is occurring in an environment where private and publicly funded health care plans are moving from the fee-for-service model to the managed care model in an effort to contain escalating health care costs. This symposium presents three research projects that will enhance the planning and delivery of health care and long term care services to older people with developmental disabilities: 1) how the aging process affects health and functioning; 2) the effectiveness of assistive technology in maintaining and improving functioning; and 3) policy changes

that affect the delivery and quality of basic health care and long term care.

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GENDER DIFFERENCES IN DISABILITY: RESULTS FROM LONGITUDINAL STUDIES OF AGING

C.F. Mendes de Leon, Rush Institute for Healthy Aging, 1645 W. Jackson Blvd, Suite 675, Chicago, IL 60612
D.M. Reed, Buck Center for Research in Aging, 505A San Marin Drive, Novato, CA 94945
W.A. Satariano, University of California at Berkeley

Participants:

M. Jylha for the FinELSA Research Group (University of Tampere, P.O. Box 607, FIN 33101 Finland) Are Women Really More Disabled? Results from the Finland ELSA Study.

D. Oman, D.M. Reed, A.Ferrara (Buck Center for Research in Aging) Do Women Have More Physical Disability than Men?

B.W.J.H. Penninx & D.J.H. Deeg (LASA study, EMGO Institute, Vrije Universiteit, 1081 BT Amsterdam, The Netherlands) Change in Physical Performance and Disability in Older Men and Women in the Netherlands.

C.F. Mendes de Leon, L.A. Beckett, D.B. Brock, G.G. Fillenbaum, L.G. Branch, J.H. Lemke, D.A. Evans (Rush Institute for Healthy Aging). Gender Differences in Disabilities in Four U.S. Communities: Longitudinal Analysis of the EPESE Data.

Discussants:

L.P. Fried (Johns Hopkins University, Baltimore, MD)
J.M. Guralnik (National Institute on Aging, Bethesda, MD)

Cross-sectional studies have shown that women consistently report higher disability levels than men. It is unclear whether these differences in disability are 'real', i.e., due to differential vulnerability to underlying disease processes, or whether they are primarily a function of differences in reporting. Longitudinal studies offer the advantage that any gender differences in reporting are likely to be constant across time, and therefore should not bias changes in disability status over time. Results from previous longitudinal studies show a fairly inconsistent pattern of gender differences in disability risk. The purpose of this symposium is to focus on this issue by bringing together presentations from several longitudinal studies of aging, from both the U.S. and other countries. Data will be presented on both self-reported disability and physical performance tests. Important items for the discussion include issues such as the duration of disability, and differential mortality and recovery rates across men and women.

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The Search for Genes that Modulate Aging in Drosophila

Chair: Robert Arking, Wayne State University, Detroit, MI

Steve Helfand, University of Connecticut, "Identifying Genes in Drosophila Whose Expression Varies During Aging"

John Tower, University of Southern California, "Stress Response and Late Acting Genes in Drosophila"

William Orr, Southern Methodist University, "Transgenic Modulation of Drosophila Longevity"

James Curtsinger, University of Minnesota, "Quantitative Trait Loci Mapping and Cloning of Longevity Assurance Genes in Drosophila"

Analysis of selected long-lived strains of Drosophila has allowed us to identify processes involved in aging. Further understanding of aging mechanisms depends on being able to describe both the genes involved in these processes and the regulatory circuits controlling their expression. Once the genes are identified, we should be able to tap into the wealth of existing genetic knowledge of Drosophila. There are multiple methods that may be used to identify the genes and each has certain advantages. The goal of this symposium is to bring together several groups engaged in this effort to describe their approach and their progress.

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THE EFFICACY OF HMR 3647, A NEW KETOLIDE, IN THE TREATMENT OF *BACTEROIDES FRAGILIS* INTRA-ABDOMINAL INFECTION IN YOUNG AND OLD MICE.

S. Qazi, S.K. Chuah, S. Gollapudi, H. Thadepalli, Division of Geriatrics/Gerontology, Charles Drew University, Los Angeles and University of California, Irvine, CA 90059.

Aging is associated with an increased incidence of infections and antibiotic failures. We examined the *in vivo* efficacy of HMR 3647, a new ketolide antibiotic in the treatment of intra-abdominal abscesses (IAA) caused by *B. fragilis* in old (18-24 months) and young (2-4 months) mice and it was compared to clindamycin and metronidazole, the approved antibiotics. IAA in mice was induced by an ip injection of a mixture of *B.fragilis* ($3x10^7$ CFU/ml) plus sterile mouse feces and $BaSO_4$. Mice were treated with HMR 3647(1.25 mg/dose/BID), clindamycin(2.5mg/dose/BID) or metronidazole(2.5 mg/dose/BID) for 11 days.Two days later, the mice were sacrificed and examined for abscesses.The abscesses were then cultured for bacteria. Absence of cultivable organisms was considered a cure. HMR 3647 sterilized abscesses in 64% of the senescent and 74% of young animals.Among others, HMR 3647 caused a decrease in the number of viable *B. fragilis* from the pus. Clindamycin cured 71% of the old and 82% of the young while metronidazole cured 50% of the old and 61% of the young. HMR 3647 therapy was well tolerated by the old. The cure rate with HMR 3647 in old and young mice was comparable to that observed with clindamycin and superior to metronidazole. Thus HMR 3647 maybe useful in the treatment of anaerobic infections in the elderly.

Can The Pharmacological Use of Growth Hormone Facilitate Recovery of Muscle From Disuse in Adult and Old Animals?

Bing Han[1], Wei Shi[2], Kazuko Sagawa[2], Debra C. DuBois[1,2], and Richard R. Almon[1,2] Depts. of Biol. Sci.[1] and Pharmaceutics[2], SUNY, Buffalo, New York 14260-1300. NIA Grant AG 10629

One hypothesis concerning the origins of age related sarcopenia is that it involves denervation without reinnervation. Disuse disrupts the relationship between a muscle fiber and it's innervating motor neuron. The result is denervation-like changes and atrophy. Optimally, when normal use is resumed, recovery of both the original expressed characteristics and protein mass should occur. We used a single hindlimb immobilization procedure to evaluate the degree to which the short-term pharmacological use of recombinant GH can aid in the recovery of muscle from disuse in "adult" and "old" animals. One hind limb of sixty 9 month old and sixty 22 month old Fisher 344 male rats was immobilized using a plastic cast immobilization procedure. After six days of immobilization, the casts were removed. The animals of each age were divided into two groups. One group was treated with rGH (4mg/kg twice a day) the other was not treated. Animals from each group were sacrificed each day up to six days of remobilization. All sacrifices for tissue harvesting were carried out between 10 AM and noon. Four muscles were removed from each leg for analysis. The results indicate that there is loss of muscle mass in the "old" animals relative to the "Adult" animals, and that this loss is greater in fast fibers relative to slow fibers. Six days of disuse causes a significant loss of muscle mass which focuses on slow tonic fibers. GH does aid in recovery from a period of disuse.

Oxidative Damage and Mitochondrial Function in MnSOD Knockout Mice. M. Williams, H. Van Remmen, and A. Richardson, GRECC, Audie L. Murphy Memorial VA Hospital and Department of Physiology, University of Texas Health Science Center at San Antonio, San Antonio, TX 78284.

Mn-Superoxide dismutase (MnSOD) knockout mice (Sod2$^{+/}$) developed by Epstein's laboratory were characterized to determine if they could be used as a model to test the oxidative stress theory of aging. Mitochondria isolated from liver and heart of Sod2$^{+/}$ mice show a 50% decrease in the activity of MnSOD while the activities of glutathione peroxidase and Cu/ZnSOD are unchanged. Oxidative damage and mitochondrial function were measured in mitochondria isolated from the liver and heart of young (4 month) Sod2$^{+/}$ mice and their wild type littermates. An increase in oxidative damage to mitochondrial protein was found as evidenced by a decrease in the activity of proteins sensitive to oxidative stress (aconitase and NADH oxidoreductase) and increased levels of protein carbonyl groups in mitochondrial proteins. However, no change in oxidative damage to cytosolic proteins was found in the liver and heart of the Sod2$^{/+}$ mice. A significant increase (45%) in liver mtDNA oxidation was also observed in the Sod2$^{/+}$ mice with no change in nuclear DNA oxidation. Mitochondrial respiration was also altered in the Sod2$^{/+}$ mice compared to their wild type littermates. Both heart and liver mitochondria from the Sod2$^{+/}$ mice show a significant decrease in the activity of Complex I, and the activity of Complexes II and III are also decreased in liver mitochondria. Mitochondria from both tissues show an increase in the rate of induction of the permeability transition pore. Thus, mitochondria from young Sod2$^{+/}$ mice show an increase in oxidative stress that is correlated to alterations in mitochondrial function. (Supported by grant P30AG13319 and a VA Merit Review Grant).

CLONING AND CHARACTERIZATION OF THE HUMAN INTERLEUKIN-6 RECEPTOR PROMOTER.

J. Zhang, G. Johnston, J. Wanagat, E.T. Keller, Eastern Virginia Medical School, Norfolk, VA 23507.

The cytokine interleukin-6 (IL-6) plays an important role in the pathophysiology of many age-related disorders such as osteoporosis and Alzheimer's disease. IL-6 mediates its activity through its cognate receptor, the IL-6 receptor (IL-6R). Thus, understanding regulation of IL-6R expression may provide clues to the development of age-related diseases. The mechanism of transcriptional regulation of the IL-6R is unknown. Accordingly, our goal was to clone and characterize the IL-6R 5'-regulatory region to understand the regulation of IL-6R gene transcription. We identified two overlapping 1.2 kb and 4.5 kb fragments of the IL-6R 5' flanking region through PCR cloning of human genomic DNA. The 3' end of these clones contained 300 bp of the previously identified IL-6R 5'-cDNA, thus confirming the identity of these fragments as IL-6R. We next subcloned the 1.2 kb fragment into a promoterless luciferase reporter vector to determine if it contained promoter activity. Two clones were identified which had strong constitutive promoter activity (~50% of the simian virus 40 promoter) when used to transiently transfect HeLa cells. However, when the fragment was subcloned in reverse orientation, there was no promoter activity consistent with orientation-dependent activity of a promoter. Promoter extension analysis revealed multiple transcription initiation sites. Data bank search revealed several putative *cis*-acting elements (C/EBP-β, GATA-1, GATA-2, CREB, and NFκB) in the proximal 1.2 kb region. In conclusion, we have demonstrated the structure of the 5'-regulatory region of the human IL-6R gene. These findings provide the foundation for functional characterization of the *cis*-acting elements of this region.

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FACULTY TRAINING PROJECTS: TRAINING FOR LEADERSHIP IN RESEARCH & PRIMARY CARE.

E.L. Watson, Geriatric Education Center Consortium, 2150 Pennsylvania Ave., Washington, D.C. 20037.

Participants:

D.R. Gifford (Dept. of Med. & Community Hlth, Brown Univ. Providence, RI 02903) Assessing Patient Outcomes of Medications Used for Patients with Dementia in Long Term Care Facilities.

B.P. Lin, G. Taylor, D.J. Allen & J.A. Ship (Dept. of Hosp. Dent., Yale Univ., New Haven, CT 06504; Univ. of Mich. School of Dent., Ann Arbor, MI 48109) Periodontal Status of Older Adults with Type II Diabetes.

A.R. Mohammed & R. Bauer (Ohio State Univ, Columbus, OH 43210, Dept. of Med., Univ. of Texas, San Antonio, TX 78284) Effect of Systemic Postmenopausal Osteoporosis on Gingival Recession.

L.Reaves, A. Chopra, P. Baseshore, M. Mouliswar (Ctr. for Aging, Univ. of Med. & Dent. of New Jersey, School of Osteopathic Med., Stratford, NJ

08084) Caregiver Satisfaction in a Dementia Evaluation Program at a Center of Excellence.

A. Sarmadi (Integrated Geriatric Fellowship, Univ. of Mich. School of Dent., Ann Arbor, MI 48109) Oral Cavity as a Window to Systemic Health.

Discussants:

M. Terpenning (GRECC, Univ. of Mich., Ann Arbor, MI 48109)

B.A. Parlak (Chief, Interdisciplinary Geriatrics & Allied Health Branch, HRSA, Rockville, MD 20857

In response to the projected rapid increase in the elderly population, Congress mandated Faculty Training Projects (FTP) in Geriatric Medicine and Dentistry in 1986 to meet a critically urgent shortage of academic faculty and researchers in geriatrics/gerontology. Currently, 8 FTPs (funded by the Bureau of Health Professions) provide a unique cross-disciplinary program, linking physicians, dentists and psychiatrists who are training in research, clinical practice, teaching & administration. Convincing evidence has identified medical consequences for dental diseases in the elderly. Relationships between oral and general health as well as the effect of dementia & chronic diseases/conditions on the ability of elders to choose & accept treatment requires interdisciplinary partnerships and a comprehensive knowledge base. The symposium will allow current and certified FTP physician and dental fellows to share the implications of their cutting edge research in geriatric health care.

ASSESSING PATIENT OUTCOMES OF MEDICATIONS USED FOR PATIENTS WITH DEMENTIA IN LONG TERM CARE FACILITIES. D.R. Gifford. Department of Medicine & Community Health, Brown University, Providence RI 02903.

Background. Despite the prevalence of dementia in the nursing home population little is known about medication's efficacy because trials of antidemetia medications usually exclude nursing home residents.

Objectives: Use a newly created pharmocoepidemiologic data base to (A) describe tacrine and estrogen use in long term care (LTC) residents. (B) measure and compare the change in outcomes of demented patients who are being treated with tacrine or estrogen to a set of similar demented patients not on either medication.

Methods: Matched cohort study

Sample: All LTC residents during 1992-95 in five states (KS, ME, MI, NY and SD) on tacrine or estrogen matched on dementia severity.

Data Source: Data from the MDS+, HCFA Medicare claims, and the On-Line Certification Automated Survey from LTC facilities in KS, ME, MI, NY, and SD have been merged to create a longitudinal pharmocoepidemiologic data base. Information on medication use (NDC codes for up to 18 medications with dose and frequency) are contained in the MDS+ from these states.

Outcome Measures: Study outcomes will be measured at admission, 3, 6, and 12 months using, validated scales and items on the MDS.

Analysis: Changes in outcome measures will be compared stratified by dementia severity. Using propensity scores to adjust for selection bias, conditional logistic regression and hierarchical outcome models will be developed.

PERIODONTAL STATUS OF OLDER ADULTS WITH TYPE II DIABETES MELLITUS. B.P-J. Lin*, G.W. Taylor, D.J. Allen, J.A. Ship. University of Michigan, Ann Arbor, MI 48109.

Knowledge of the relationship between diabetes mellitus and periodontal disease in older adults is limited. The prevalence of both diseases increases with age. To study the association between type II diabetes mellitus (DM) and periodontal disease in older adults, we examined the prevalence, extent, and severity of loss of periodontal attachment (LPA), probing pocket depth (PPD), bleeding upon probing (BOP), calculus, and gingival recession in 44 community dwelling dentate adults, aged 54-86 years. Twenty-four subjects had DM and twenty were nondiabetic age-, race-, and gender-matched controls. Periodontal status was assessed according to modified NIDR guidelines. Cross sectional data were analyzed using Student's t-test and ANOVA. Results of this pilot study revealed several interesting patterns. Mean LPA (2.5 ± 0.9, mean ± SD) and PPD (2.2 ± 0.5) of long duration diabetics (LDDM, ≥10 years) were higher than mean LPA (1.9 ± 1.0) and PPD (1.9 ± 0.3) in short duration diabetics (SDDM, <10 years). LDDM also had higher proportion of 3+ teeth with bleeding (93%) than SDDM (78%) and noDM (70%; p=0.10). Subjects with DM had significantly greater proportion of 1+ teeth with both 5+ mm PPD and BOP than noDM (33% vs. 5%; p=0.02). LDDM, compared to SDDM and noDM, also had a greater proportion of 1+ teeth with both 5+ mm PPD and BOP (47%, 11%, and 5%, respectively, p<0.01). When defining severe periodontitis as 1+ teeth with both 6+ mm LPA and BOP, a greater proportion of LDDM had severe periodontitis than both SDDM and noDM (40%, 22%, 15% respectively, p=0.10). There were no noteworthy differences for gingival recession and calculus and for contrasts using glycemic control. Results from this pilot project suggest that there may be important associations between diabetes mellitus and periodontal health in older adults, particularly with respect to duration of DM and severity and extent of periodontitis.

Effect of Systemic Postmenopausal Osteoporosis on Gingival Recession

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Osteoporosis and periodontal disease are both major public health problems and have identifiable multifactorial risk factors such as increasing age, chronic use of certain medications e.g. steroids, certain medical disorders such as diabetes, use of alcohol and smoking. In addition, other risks known to contribute to Osteoporosis include being female, being of Caucasian or of Asian origin, lack of physical activity, lack of sunlight, being of slight body build and low calcium intake, and having bilateral oophorectomy. Although dental plaque is generally accepted as the most important single etiologic factor in periodontitis, it has been suggested that osteoporosis might be also a contributing etiologic factor. This relationship has not been fairly established, however. Other studies that have measured periodontal status and mineral status of the skeleton have found no clear correlation between the two. However, there is agreement that generalized osteoporosis affects the speed of resorption and bone density of the maxillae and mandible. The purpose of this study was to investigate the strength of association between spinal bone density and periodontal disease.

A cross-sectional study was designed to examine the strength of association between systemic osteoporosis and periodontal status in postmenopausal non-Hispanic white women. Twenty subjects with low bone density and a spine bone density of 0.753 ± 0.039 dual-energy x-ray absorptiometry units (g/cm$^{2)}$ and 22 subjects with high bone density and a spine bone density of 1.032 ± 0.028 dual-energy x-ray absorptiometry units (g/cm^2) were randomly selected from a cohort of 565 women. Periodontal assessment included Plaque Index, Gingival Index, pocket depth, gingival recession, and periodontal attachment level.
There were no significant differences in Plaque Index, Gingival Index, and probing depth in both groups; however, there were significant differences in gingival recession components of periodontal attachment

level in both groups. This study suggests that systemic osteoporosis may contribute to periodontal attachment loss in the form of gingival recession. Further studies are needed to quantify the rate of gingival recession in osteoporotic women.

CAREGIVER SATISFACTION WITH A DEMENTIA EVALUATION PROGRAM AT UNIVERSITY-BASED CENTER OF EXCELLENCE

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Providing quality care to the growing number of patients with dementia is a complex and challenging task for today's health care professional. In the context of a managed care environment, quality of care is largely measured by health outcomes and patient satisfaction. Frequently with dementia patients, it is both the patient and the caregiver who are the recipient of support services and the caregiver who serves in the decision making capacity for their loved ones. Therefore, it is critical to provide services which meet or exceed the expectations of the caregiver and to assess caregiver satisfaction in order to ensure quality of care. To date research on caregiver satisfaction has not been published.

The purpose of this study was to assess caregiver satisfaction with services provided through a university-based dementia evaluation program. The dementia evaluation includes a comprehensive interdisciplinary team assessment by a geriatrician, geriatric psychiatrist, neurologist, gerontological nurse practitioner and social worker. Following the evaluation, a family meeting is held to explain the diagnosis and discuss the treatment plan.

A total of 20 caregivers were included in the study. The Services Satisfaction Scale 30 (SSS 30) was used to measures caregiver satisfaction with access to services, mannerisms of primary care provider, and the outcome of the dementia evaluation. Caregivers were mostly daughters aged 46-55 who cared for their demented mothers outside of their homes. Cognitive status as measured by the Folstein Minimental Status Exam (MMSE) ranged from 16 to 25 with an average of 17.2. Services recommended by the team included daycare, respite, home health, support groups, educational readings, and prescription drugs for memory and problem behaviors. The survey was administered to caregivers 1 to 2 months following the family meeting.

Results indicate that 95% of caregivers were mostly satisfied or delighted with services provided. Ninety percent felt that the primary care provider was highly competent and that the collaboration of the team was good to excellent. Most caregivers did not respond to questions about access to care, although several indicated difficulty with obtaining appointments. Seventy percent reported being mostly satisfied or delighted with information provided about Alzheimer's disease, maintaining caregiver's well being and recommendations to help with caregiver stress. Prescriptions, relief of symptoms and referrals for support services were likewise important outcomes for the caregiver.

In conclusion caregivers were mostly satisfied with primary care provider mannerisms and outcomes of the dementia evaluation program but had issue with accessability to appointments. It is therefore necessary to address accessability of appointments in order to improve the quality of services provided.

ORAL CAVITY AS A WINDOW TO SYTEMIC HEALTH

M. Sarmadi, (University of Michigan Dental school, Integrated Geriatric Fellowship Program, Ann Arbor VA)

In an era of sophisticated diagnostic tools and imaging techniques, a simple window into many systemic conditions is frequently overlooked: the oral cavity. It is an inexpensive and readily available source of information for the health care provider The interactions between oral and systemic conditions are common in the geriatric population Examples include diabetes, dehydration, nutritional deficiencies, anemia, leukemia and other cancers, ketosis, autoimmune disorders, viral, bacterial and fungal infections, coagulopathies, osteoporosis, aspiration pneumonia, CAD and CVA. Disorders of dentition, periodontium, oral mucosa, and the salivary glands may raise suspicion for such underlying conditions. Diagnosis and early intervention as well as prevention of many common diseases can be improved by understanding the physiology of the oral cavity and examining it on a regular basis.

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Symposium: Opportunities and Challenges for Geriatric Nursing: Initiatives of The Hartford Institute for Geriatric Nursing

Chair: Mathy Mezey, Hartford Institute for Geriatric Nursing, New York University, Division of Nursing, 429 Shimkin Hall 50 West 4th Street, NY, NY 10012

Presenters:
Mathy Mezey, (Hartford Institute, NYU) Education Initiatives
Terry Fulmer, (Hartford Institute, NYU) Research Initiatives
Elaine Gould, (Hartford Institute, NYU) Practice Initiatives
Mathy Mezey, Consumer Education and Public Policy Initiatives

Discussants:
Taylor Harden, National Institute on Aging, Washington, DC.
Neville Strumpf, Univ. of Pennsylvania, School of Nursing, Philadelphia, PA
Lois Evans, Univ. of Pennsylvania
Liz Capezuti , Univ. of Pennsylvania

A vision of helping the elderly maintain the best possible level of health and live in comfort and dignity drives the work of the Hartford Institute for Geriatric Nursing. The Institute is leading a national effort to raise the standards of care to the elderly by promoting the highest level of competencies in the nurses who deliver that care. The Hartford Institute is creating opportunities for and meeting the challenges of geriatric nursing in the current complex health care environment.

The Hartford Institute has developed four strategic initiatives in education, practice, research, and consumer education and public policy. This symposium will report on the work of the Institute: its opportunities and challenges to date. The respondents will comment on the efficacy of these efforts. Audience discussion will follow.

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NUTRITIONAL MANAGEMENT OF THE ELDERLY WITH DEMENTIA

E. Ghezzi, University of Michigan School of Dentistry, Ann Arbor, MI 48109-1078;
E. Taira, Montefiore Medical Center, Bronx, NY 10458

Participants:

E. Granieri (University of Pittsburgh, Pittsburgh, PA) The Quintessence of Medicine: Integration of Nutrition into Clinical Care.

B. Kinosian (University of Pennsylvania, Philadelphia, PA) Empirical Ethics: Consequences of Nutritional Assessments and Interventions for Persons with Dementia.

J. Yellowitz (University of Maryland, Baltimore, MD) The Impact of Oral Diseases and Their Treatment on the Nutritional Status of the Elderly with Dementia.

J. Rogers (University of Pittsburgh, Pittsburgh, PA) The Role of Occupational Therapy in Oral Health and Nutrition.

J. Karlawish (University of Pennsylvania, Philadelphia, PA) Guiding the Tube that Feeds.

Discussant:

C. Blaum (University of Michigan, Ann Arbor, MI)

Dementing illnesses are a growing problem among the elderly, and recently there has been interest in the special nutritional concerns of these patients that affect oral and systemic health. The purpose of this symposium is to focus on the identification and diagnosis of patients at risk for nutritional disorders. A range of therapeutic options at different stages of cognitive and behavioral impairments will be explored with emphasis placed on patient evaluation, interventions, risks of procedures, and prognosis. Multidisciplinary input will be provided by experts in the fields of ethics, dentistry, dietetics, medicine, and occupational therapy. Finally, there will be a discussion of future directions in understanding the pathophysiology and management of nutritional disorders in the older patient with dementia.

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IS GH/ IGF- I AXIS ACTIVITY RELATED TO SERUM PSA LEVELS IN HEALTHY OLD MEN?

T.Munzer, S.M. Harman, C. Christmas, M.F. Bellantoni, C. St. Clair, K.Pabst and M.R. Blackman, Gerontology Research Center, NIA, NIH, and Johns Hopkins Medical Institutions, Baltimore, MD 21224.

Recent data suggest that serum IGF-I levels predict development of prostate cancer more strongly than do PSA values. However, the relationships of endogenous GH/IGF-I axis activity with serum PSA levels and prostate size in healthy elderly men are unknown. We studied 66 healthy nonobese men, aged 71.5 ± 4.6 yrs (mean ± SD), with mean values for weight 82 ± 9.6 kg, BMI 27 ± 2.8 and % total body fat 30 ± 6% by DEXA. All men had age-related reductions in serum levels of IGF-I (<220 ng/ml; mean 134 ± 40) and testosterone (T< 560 ng/dl; mean 395 ± 95), and serum PSA levels <4.0 ng/ml (mean, 1.5 ± 1.1). We also measured areas under spontaneous nocturnal GH secretory peaks (log AUPGH) and serum IGFBP-3 levels. Digital rectal examination revealed minimally (n=42) or moderately (n=21) enlarged prostates. By ANOVA, PSA ($p<0.0001$) and International Prostate Symptom Scores (IPSS) ($p<0.003$), but not log AUPGH, IGF-I, IGFBP-3 or T, were higher in men with larger prostates. Simple regression analyses revealed no significant ($p<0.01$) relationships of PSA with age, weight, BMI, % total fat, log AUPGH, IGF-I, IGFBP-3, T, or IPSS. Thus, healthy elderly men with larger prostates had higher PSA levels and IPSS. There is no apparent strong relationship of GH/IGF-I axis activity, T levels or body fat with PSA. Whether GH secretion or serum IGF-I levels can discern benign vs malignant prostate enlargement in old men remains uncertain.

INFLUENCES OF AGING AND SECULAR EFFECTS ON SERUM TESTOSTERONE LEVELS IN HEALTHY MEN.

S.M. Harman, J.D. Tobin, J. Pearson, E.J. Metter, J. Fozard, and M.R. Blackman, Gerontology Research Center, NIA, NIH, and Johns Hopkins Medical Institutions, Baltimore, MD 21224.

Serum testosterone (T) levels have been reported to decline with age in most cross-sectional studies. To date, however, there are no analogous data from large longitudinal investigations. We measured T, sex hormone binding globulin (SHBG), DHEA, androstenedione (Δ4), and androstanediol glucuronide (AG) in 3721 sera obtained from 890 men aged 22-96y in the Baltimore Longitudinal Study on Aging between 1961 and 1995. Using data from each subject's 1st visit, linear regression revealed a cross-sectional decline in T with age ($r= -.33$, $p<.0001$, slope= -3.4 ng/dl/y). Multivariate analysis revealed significant ($p<.0001$) independent effects of age and sampling time (secular effect). Longitudinal analysis in the subset of 692 men with 3 or more samples (means of 5 samples/subject and 15 y follow-up) confirmed the secular effect. After adjustment of T levels to the median date, longitudinal analysis revealed decreases in T with age (mean slope= -5.0 ng/dl/y, $p<.0001$) consistent with those in the cross-sectional analysis, with similar decade-by-decade rates of T decline. The secular fall in T represented 20% of the variance, and was disproportionate to the secular decreases in DHEA, Δ4, and AG (<3%) or rise in SHBG (6%), suggesting that it was not an artifact. We conclude that serum T levels decreased longitudinally with age, with a substantial secular decrease from 1961-1995. Whether the latter decline in T results from environmental or other factors deserves further study.

DIETARY CONTROL AND IGF-I RESPONSE VARIABILITY TO GHRH IN THE AGED

M.V. Vitiello, R.S. Schwartz, D.M. Buchner, K.E. Moe, K. Trimm and G.R. Merriam, Psychiatry and Medicine, University of Washington and the VA PSHCS, Seattle, WA 98195.

GH secretagogues are being studied for possible beneficial effects in aging. Circulating IGF-I levels are commonly used to titrate dosage, but the effects of potential confounds variables such as diet have not been well studied. In a large, on-going, randomized placebo-controlled trial of GHRH treatment (five months of single nightly doses of 1mg GHRH (1-29) NH2 or placebo), IGF-I values are obtained during both controlled and ad lib diets. IGF-I levels rose 33% (p<.03), during GHRH treatment and were unchanged during placebo. When quantified using coefficients of variation, IGF-I levels were highly reproducible during controlled diet for both GHRH and placebo conditions (3.2±0.8 and 4.1±0.2, mean±SEM) and were significantly (p<.01) more variable during ad lib diet (12.8±1.4 and 11.2±1.1; GHRH and placebo, respectively). This greater within-subject variability during ad lib diet could potentially obscure GHRH treatment effects. A controlled diet is one way to reduce variability in IGF-I response levels and improve the reliable observation of potential treatment effects.

Supported by PHS grants KO2-MH01158, MH53575, RR37, the VA and Serono Laboratories Inc.

RELATIONSHIP BETWEEN INSULIN-LIKE GROWTH FACTOR 1 AND MOBILITY FUNCTION IN HEALTHY ELDERLY WOMEN.

EA Burns, EH Duthie, E SASSE, I Rudman, D Mattson. VA Medical Center, Medical College of Wisconsin, Milwaukee, WI 53295.

With increasing age, levels of growth hormone (GH) and insulin-like growth factor 1 (IGF-1) decline. This is associated with declining lean body mass and increase in adipose mass. In spite of these relationships, a clear association between IGF-1 and physical function has not been demonstrated. We measured IGF-1 levels, VO_2 max, and functional mobility using the "Get-Up and Go" test in a group of healthy elderly women .

Of the 106 women, mean age + S.D. = 66.5 ± 0.4 yrs., 30% (n=32) had baseline levels of IGF-1 lower than 114 ng/ml (range of normal for healthy young adults 114-492 ng/ml;mean ± S.E. 89.4 ± 2.9ng/ml). The remaining 84 women had a mean baseline IGF-1 level of 167.9 ± 5.3 ng/ml. Women with low baseline levels of IGF-1 were slightly slower on"Get-Up and Go," but 2 1/2 years after basline assessment were significantly faster on the same measure than women with normal IGF-1 levels at baseline (mean change in seconds ± S.E. = 1.07 ± 0.24 vs. 0.21 ± 0.17, p < 0.02). These effects were independent of VO_2 max and lean body mass. Women with initially low IGF-1 levels did not have loss of function as might have been predicted, but actually performed slightly better than women with IGF-1 levels in the normal range. This effect was independent of aerobic conditioning. The significance of low IGF-1 levels for functional status remains to be determined.
Supported by NIH AG 12210. CM-3

CORRELATION OF CORTISOL DYNAMICS AND BONE MINERAL DENSITY IN AGING MEN AND WOMEN.

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Glucocorticoids accelerate the loss of bone mineral density (BMD). This study measured salivary (free) cortisol at 11 PM (nadir) and 7 AM (peak) in elderly community dwellers (N=224, age=67 ± 2 [SD]) vs. younger healthy subjects (N=73, age=37 ± 11 [SD]). Salivary cortisol at 11 PM was significantly elevated in the elderly group (2.2±0.1 nmol/L) as compared to the younger group (1.2±0.1 nmol/L; P<0.001) whereas there were no differences between groups at 7 AM (14.5 ± 0.8 nmol/L). Increased 11 PM cortisol was observed in elderly subjects regardless of gender (97 women vs 127 men). Salivary cortisol and BMD were correlated in the elderly group. In women, BMD in the femoral neck and lumbar spine had a significant negative correlation with 11 PM salivary cortisol (r=-0.21, P<0.05). In men, there were no significant relationships between BMD and 11 PM salivary cortisol except for a positive correlation at the trochanter (r=0.18, P=0.03). It is concluded that elderly subjects exhibit an elevated late-night nadir in salivary cortisol with a normal morning peak. A portion of the age-related decline in BMD in women may be attributable to the increase in free cortisol in the evening. Supported by NIH AG 12210.

CM-3

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A CRITICAL ANALYSIS OF THE WISCONSIN QUALITY INDICATORS USING NEW YORK'S MDS DATABASE.

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The Wisconsin Quality Indicators (QIs), among the first developed for long term care, are being considered for adoption by New York and other states for use in the survey process and by HCFA in making comparisons of nursing home quality nationwide. However, this paper outlines important statistical and methodological issues and key decision points and logic determinations that must be resolved *prior* to implementing a set of QIs to ensure accurate and consistent quality measures. The New York State Department of Health funded this two-year study using longitudinal MDS data on more than 100,000 residents from 650 nursing facilities. Findings address inconsistencies in how missing data is treated, what is actually counted in denominators and numerators, and what is excluded from the calculations, and delineate precise technical specifications regarding time-period analyzed, assessment types used, varying look-back periods of items, and the lack of key risk adjustments (e.g., for dementia residents and specific diagnoses such as AIDS) which allow fair comparisons. This is imperative if facility-to-facility and state-to-state comparisons and rankings are planned. The goal of a national database is critical to ensuring standards of quality, but these data are not useful without accurate and consistent outcome measures. This in-depth study presents important new information which will be useful in the development and application of quality measurement systems nationwide.

HIERARCHY ACROSS MOBILITY TASKS AND IMPLICATIONS FOR DISABILITY PREVENTION.

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Understanding the pathway along which older adults progressively lose function is a basic step for disability prevention. In this regard, it has been recently shown that there is an ordered development of dependency onset among ADL tasks. No studies have, however, explored whether loss of function might follow a hierarchical pattern in the mobility domain. Because mobility disability precedes ADL's disability, such information could provide insight into the disablement process at an earlier stage.

The specific aims of this analysis are (1) to evaluate the hierarchy of disability across mobility tasks using cross-sectional data, and (2) to explore the extent to which difficulty in one task is associated with having difficulty in other mobility tasks.

This report uses data from the Women's Health and Aging Study II, a prospective investigation of the causes of physical disability in the two-thirds least disabled community-dwelling women 70-80 years of age. Self-report of difficulty on 8 mobility tasks was obtained using standardized questionnaires. Specific aim #1 was accomplished by calculating the probability of having difficulty in one task given report of difficulty in others, for all possible combinations of two tasks. Hierarchical cluster analysis were used to address specific aim #2.

We found evidence of a hierarchy structure across mobility tasks (i.e., difficulty in one task is likely to precede difficulty in another task in the following order: stooping → heavy housework → walking ½ mile → climbing up 10 steps → transferring from car → walking ¼ mile → transferring from bed → walking across small room). Also, we present a graph (dendogram) demonstrating the correlations of the report of difficulty in one task to having difficulty in other mobility tasks.

The characterization of such hierarchical relationships can be very useful in mapping the progression of functional decrements in older adults. Such mapping can provide a theoretical basis for deciding who to screen for declining function at sufficiently early stages to prevent frank disability. Also it could assist in choosing the most appropriate definition for mobility disability, given baseline level of functioning of the study population.

Assessing Proxy Reliability of Medical Outcomes Study Short Form 36 in Elderly Population.

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As interest in outcomes research in long-term care increases, an important issue is how to collect reliable information when potential subjects lack the capacity to respond. In such cases, the use of proxies may provide an option. Using 41 pairs of elderly individuals (≥ 65 years of age) and their proxies, this study tests the proxy reliability of the Medical Outcomes Study Short-Form 36 (SF-36) as it applies to the elderly population. With the exception of the mental health subscale, results from a one-way analysis of variance (ANOVA) show that all the other SF-36 subscales (bodily pain, general health, physical functioning, role-emotional, role-physical, social functioning, and vitality) do not differ significantly between respondents and proxies (p>. 05). Paired sample t-tests further confirm that all but general health and mental health subscales do not differ significantly at the 0.05 level. Nevertheless, these insignificant differences found in ANOVA and paired sample t-tests should be interpreted within the context of the relatively modest correlations of the paired samples (range from .40 to .82). This study provides an example for researchers to pay closer attention to the issue of using proxies in research on elderly subjects.

IS EARLY FUNCTIONAL ASSESSMENT USEFUL TO PREDICT DISCHARGE LOCATION IN ELDERLY MEDICAL IN-PATIENTS ?

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This study aimed to determine which functional characteristics collected upon hospital admission are associated with home discharge in a cohort of elderly medical inpatients.

Study subjects (n=401) were every other patients aged 75+ admitted over a 6-month period to the internal medicine service of an academic medical center in Western Switzerland. We excluded patients with severe cognitive impairment, terminal diseases or previously living in nursing homes. Data on demographics, medical, physical *(BADL & IADL)*, social and mental status *(MMSE & GDS)* were collected upon admission. Discharge location was collected from the hospital computerized system. For this analysis, we excluded subjects who died during their stay (n=20).

Subject's mean age was 82.4 years, 60.9% were female. Overall, 256 patients (67.2%) were discharged at home. Compared to subjects discharged to intermediate or long term care, these subjects were younger (82.0 vs 83.1 years), less frequently female (56.6 vs 69.6%), living alone (52.7 vs 67.2%), receiving formal in-home help (37.5 vs 56.8%), dependent in IADL prior to admission (83.2 vs 92.8%), and in BADL at admission (62.5 vs 84.8%). In addition, they had more frequently normal GDS (<6) and MMS-E (≥24) scores (85.5 vs 60.8% & 75.4 vs 63.6% respectively), and no comorbidity at Charlson index (41.8 vs 24.1%)(all p<.05). In multivariate analysis, home discharge remained significantly associated with male gender (OR 1.8, 95%CI 1.0-3.3), BADL independence (OR 2.3, 95%CI 1.2-4.3), normal GDS (OR 2.6, 95%CI 1.5-4.7), and absence of comorbidity (OR 2.3, 95%CI 1.3-4.0).

In this population, male gender, independence in BADL, absence of comorbidity and normal GDS score independently predicted home discharge. Early assessment of physical and mental functions upon hospital admission might be useful to anticipate and improve discharge planning of elderly subjects without these characteristics.

SEVERITY OF DISEASE AND HEALTH-RELATED QUALITY OF LIFE IN OLDER PERSONS

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Health-related quality of life (HRQL) reflects the physical, psychological and social consequences of multiple diseases in geriatric patients. Nevertheless, it is largely unexplored how HRQL is influenced by differences in specific disease severity. A survey was carried out on three groups (54 subjects each) of patients (94 males, 68 females; age: 74.0±0.6 years) referred to outpatient rehabilitation clinics for ischemic stroke, Parkinson's disease (PD), or chronic coronary heart disease (CHD). Cognitive impairment and severe comorbidity were exclusion criteria. Stroke, PD and CHD severity assessed by Fugl-Mayer Scale (FMS), Webster Rating Scale (WBRS), and total work capacity (TWC, Kg m), respectively. Comorbidity assessed by the Index of Disease Severity (IDS). HRQL was determined by the Sickness Impact Profile (SIP). In PD, WBRS score correlated linearly with SIP global score, whereas in stroke and CHD the relation of disease severity with SIP was limited to least severely diseased stroke (FMS score >160) and the most severely diseased CHD (TWC <700) patients. These relations were unmodified adjusting for age, sex, and IDS. The relationship between disease severity and HRQL is often non-linear and, depending on initial severity, similar changes in disease severity may have different impacts on HRQL. These findings may help in identifying patients most likely to improve substantially their HRQL even after small changes in disease severity.

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EFFICACY OF REPAGLINIDE IN ELDERLY VS YOUNGER POPULATIONS OF TYPE 2 DIABETICS: HbA_{1c} AND FPG PARAMETERS OVER TIME IN LONG-TERM ACTIVE-CONTROL TRIALS

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Net changes in fasting plasma glucose (FPG) and glycosylated hemoglobin (HbA_{1c}) are commonly used as therapeutic milestones in evaluating long-term efficacy in the treatment of type 2 diabetes. In five studies contrasting repaglinide (REP) with other anti-diabetic agents in the treatment of chronic type 2 diabetes, long-term (> 6 month) responses to several different regimens of REP pharmacotherapy were contrasted between patient populations aged > 65 years (N=312) and those aged ≤ 65 years. Assessment of HbA_{1c} values over time showed no differences between the two groups. Mean percent changes in HbA_{1c} values from baseline per study were 0.1, 0.7, 0.5, 0.2, and 0.8%, for patients aged ≤65 years. For patients >65 years, equivalent per study percent changes from baseline were 0.1, 0.6, 0.7, 0.2, and 0.7%. Comparisons of change from baseline in FGP variables during REP pharmacotherapy showed a similar lack of distinction by age of treatment groups. Mean per study, FPG values showed changes from baseline of 0.3, 1.7, 1.1, 0.4, and 0.9 mmol/L for younger patients while equivalent per study changes in treatment groups >65 years were 1.1, 1.1, 1.4, 0.6, and 0.8 mmol/L. Summed mean changes from baseline in FPG were 0.8 mmol/L vs 1.1mmol/L for the younger vs older groups. While there were some indications that younger treatment groups showed a wider range of response variability these five studies strongly suggest that REP use is equally effective when used by either elderly or younger populations of type 2 diabetics.

TREATMENT EXPECTATIONS OF PATIENTS WITH ALZHEIMER'S DISEASE

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Treated Alzheimer's disease is emerging as a new clinical entity for which we have little symptomatic or phenomenological knowledge. To date, anti-dementia drug trials have used standard scales and staging systems. While these allow for important insights, they do not provide an accurate portrayal or understanding of the treatment expectations, motivations, and experiences of patients with Alzheimer's disease (AD) and their caregivers during the early stages of medication use. A technique known as Goal Attainment Scaling (GAS) allows for a precise formulation of the pattern of deficits and progression of symptoms in patients with AD who are in anti-dementia drug trials and treatment programs. We shall present preliminary results of a multi-centre study which qualitatively expands the use of the goal attainment scaling technique to define the expectations and effects of treatment with donepezil in patients with Alzheimer's disease over a one year period. Issues of reliability and validity of both our qualitative and quantitative methodological approaches will be assessed.

INAPPROPRIATE IRON THERAPY IN THE ELDERLY

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Both iron deficiency and anemia of chronic disease are common forms of anemia in old age. Appropriate treatment of anemia clearly depends upon the underlying cause; the etiology and the findings in the true iron deficiency anemia and anemia of chronic diseases are different. Unfortunately, in many cases, elderly patients with chronic diseases are started on oral iron therapy without a clear understanding. In an academically affiliated 400 bed nursing home, we decided to review the use of iron in all our residents. A total of 41 residents were noted to be on oral iron therapy. Eight residents on hemodialysis and on anticoagulant therapy were excluded from this study. Of the 33 residents, 10 (30.3%) were men and 23 (69.7%) were women. Medical charts were reviewed for appropriatesness of diagnosis based on lab values and response to iron therapy. While 25 (75.7%) residents were found to have true iron deficiency anemia, in 8 (24.2%) residents, oral iron use was considered to be inappropriate and these residents had failed to show any hematological response to iron treatment. We conclude that in all elderly patients, before therapy is considered, a precise diagnosis of true iron deficiency anemia must be established.

LONG-TERM EFFICACY OF RIVASTIGMINE TARTRATE IN ALZHEIMER'S DISEASE: RESULTS OF AN OPEN-LABEL EXTENSION STUDY

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Alzheimer's disease (AD) is a progressive dementia associated with impaired cholinergic neurotransmission. Trials with other acetyl-cholinesterase inhibitors (AChEI) have detected modest improvements in cognition and behavior. Rivastigmine tartrate (RV), a pseudo-irreversible, centrally selective, carbamate AChEI has demonstrated efficacy in treating Alzheimer's disease in several phase III clinical trials.

Patients who participated in a 26-week study of RV entered into a 6-month open label extension. 699 patients with mild-to-moderate AD were randomized to treatments with RV or placebo. After 26 weeks, all patients received RV and were titrated to their maximally tolerated dose. Preliminary analysis shows that by week 38, patients initially treated with placebo performed nearly 3 points higher on the ADAS-Cog compared to week 26. Between 38 and 52 weeks, patients declined, although they were still performing at a higher average score on the ADAS-cog at week 52 than the placebo group at the 26-week point. At the end of 52 weeks, all of the patients were performing above a hypothetically predicted level for patients who would have remained on placebo for the next 26 weeks. This study shows that the effect of RV was sustained be-yond the end of the 26-week period of the controlled trial.

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HYPNOTIC AND ANXIOLYTIC BENZODIAZEPINES CONFER A DIFFERENT RISK OF FEMUR FRACTURE

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The use of benzodiazepines (BDZ) is associated with an increased risk of hip fracture. Since injurious falls occur in the early morning hours or at night, we hypothesize that among BDZ, hypnotic and anxiolytic agents may confer a different risk. We conducted a case-control study on elderly patients (aged 65+) living in long-term care using the SAGE database. This is a multi-linked, population-based dataset, which includes data on all residents admitted to ~1,500 facilities in 5 U.S. states, between 1992-1995. We identified 8881 cases of femur fractures via ICD-9 codes 820.0 and 821.9 on all Medicare-reimbursed hospitalizations. 35,335 control patients were selected via a random procedure matching on state, age (±2.5 years), gender, and index date. BDZ were classified into hypnotic or anxiolytic based on FDA official labeling. Multiple conditional logistic regression models were constructed adjusting for potential confounders. Overall, BDZ users had a 10% increase of risk (OR 1.1, 95%CI 1.01-1.23). However, users of long half-life BDZ hypnotic were twice as likely to have a fracture (OR 2.0, 95%CI 1.26-3.27), and a strong dose-relationship was evident. Flurazepam (OR 1.9, 95%CI 1.20-3.20) and quazepam (OR 2.6, 95%CI 0.85-8.0) were associated with the higher risk. Use of short half-life BDZ hypnotic, or of any type BDZ anxiolytic was not associated with an increased risk. In the treatment of insomnia among elderly individuals, the choice should be limited to short half-life BDZ at the lowest effective dose.

Inappropriate Dosages of Thyroxine in the Elderly

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Because of the increasing incidence and diagnostic difficulties of thyroid dysfunction, it is commonly recommended that all older people should be routinely screened with thyroid tests. Although the elderly patients with hypothyroidism usually require lower doses of thyroxine than younger adults, there are no precise calculations to determine the exact dose of thyroxine; estimation of the dose of thyroxine on clinical grounds alone is not sufficient.

In an academically affiliated long-term care facility, we reviewed the records of 40 patients who were being treated with thyroxine replacement therapy. Mean age of this group (32 women, 8 men) was 76 years, the oldest being 97 years old. On clinical exam all patients were judged to be in Euthyroid state. Recent thyroid function test results of all patients were carefully reviewed. 13 patients (32.5%) were noted to have abnormally high TSH and 5 patients (12.5%) were found to have abnormally low TSH levels. We conclude that since signs and symptoms of thyroid dysfunction in the elderly are often absent or too subtle, treatment with thyroxine must be monitored with frequent TSH estimation.

COMPARITIVE PHARMACOKINETICS OF REPAGLINIDE IN TYPE 2 DIABETIC ELDERLY, HEALTHY ELDERLY, AND HEALTHY YOUNG SUBJECT POPULATIONS

Vibeke Hatorp, Poul Strange. Novo Nordisk Pharmaceuticals[2], Princeton, NJ 08540.

The pharmacokinetics of repaglinide (REP) was compared among 3 populations of healthy elderly (HE; > 65 years; n=12), type 2 diabetic elderly (DE; >65 years; n=12) and healthy young (HY; 18-40 years; n=12) subjects after single and multiple REP dosing. On day 1, after a 10 hour fast, each subject received a single 2 mg dose of REP. Starting on day 2 and continuing for 7 days, each subject received a 2 mg dose of REP 15 min before each main meal (3meals/day). Pharmacokinetic profiles including AUC, C_{max}, T_{max} and $T_{1/2}$ were obtained at completion of both single and multiple dose regimens. Although AUC data was equivocal both at baseline and completion, endpoint changes, (day 1 vs day 9), in mean C_{max} varied little between groups (HY: +10.6; DE: +12.5; HE: +5.3) and, in mean T_{max} were indistinguishable between (HE: +0.1) and (DE: +0.0) subjects. Mean T_{max} was significantly higher at endpoint in HY subjects (HY: +4.2, $p<0.05$) but $T_{1/2}$ values were again similar between all three groups (HY: 1.0; DE: 1.7; HE: 0.9). All day 1 and 9 pharmacokinetic parameters, while consistently higher for DE subjects with type 2 diabetes, did not vary between HY and HE subjects. In all groups, serum REP concentrations were similar before dosing on both days 2 and 9 of this study. There were no adverse events apart from anomalous episodes of hypoglycemia in one HY subject. Our findings suggest that for single and multiple-dose regimens, REP absorption and elimination is similar in both elderly and young subjects, a circumstance which affords elderly type 2 diabetics greater flexibility in their daily medication schedule.

USING PRE-PACKAGED MODULES TO INCREASE PRIMARY CARE RESIDENT COMPETENCIES IN GERIATRICS

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Didactic core curriculum in geriatrics for primary care residents is often a difficult issue for residency program faculty (RPF). Residency sites often lack experienced geriatricians to present this information. To address this need, ten geriatric educational modules were developed and distributed for use by residency sites throughout Wisconsin over a multi-year project.

Methodology. Following a needs assessment to determine core topics, expert geriatricians developed modules with the assistance of educational consultants. Module dissemination workshops in 1997 and 1998 oriented RPF to the modules. The pre-packaged modules include objectives, teaching plans, speaker notes and slides as well as evaluation forms.

Summary of Results. Four modules, distributed in 1997, were presented by 16 RPF to over 250 residents in the first year after their distribution. For each module, residents completed a retrospective pre/post assessment of their competencies based on the module's educational objectives. For 27 of the 28 objectives, the differences between the pre and post scores were significant at the .001 level. Additionally, learner satisfaction with the modules was high; 99% agreed or strongly agreed with the statement, "The instructor was knowledgeable about this topic".

Conclusion. Pre-packaged geriatric educational modules, designed by expert geriatricians, can effectively raise the competency levels of primary care residents.

HEALTH AND BODY CHANGES (HEALTH ABC): A LONGITUDINAL STUDY OF BODY COMPOSITION AND FUNCTIONAL CHANGE IN A BIRACIAL POPULATION.

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Participants:

A.B. Newman (University of Pittsburgh, Pittsburgh, PA 15213) Goals of Health ABC: Understanding the role of weight change in functional decline.

S.M. Rubin, J. Bonk, L. Lichterman (University of California, San Francisco, San Francisco, CA 94105) The Recruitment of Healthy Older Adults into the Health ABC Study.

E.M. Simonsick (National Institute on Aging, Bethesda, MD 20892) Measuring Fitness and Self-Report Function in Healthy Older Adults: Expanding Familiar Approaches.

T. Miles, D. Ives (University of Texas, San Antonio, TX 78484) Weight-Related Health Conditions: The Importance of Assessing Co-morbidity in Health ABC.

S. Kritchevsky, F. Tylavsky. (Department of Preventive Medicine, University of Tennessee, Memphis, TN 38105) Body Composition Measurement and the Epidemiology of Functional Decline.

Discussant:

T. Harris (National Institute on Aging, Bethesda, MD 20892).

The Health and Body Changes Study (Health ABC) is a 7-year prospective study of 3000 community-dwelling persons aged 70 - 79 years (50% female/50% African-American) living in Pittsburgh, PA and Memphis, TN. The primary aim of Health ABC is to evaluate the relationship between weight/body composition change and subsequent disability. There are two primary hypotheses that form the core of this study. First, an absolute loss of lean mass (bone and muscle) is related to the observed declines in physical function. Second, a shift in the relative proportion of lean mass to fat is related to many of the chronic conditions in older adults. These changes in body composition may be accelerated during acute illness. This symposium will describe the design, sampling strategy, and application of new technologies for body composition measurement that were used in the baseline examination of this new cohort. Sponsored by the National Institute on Aging (Contracts #NO1-AG-6-2101, NO1-AG-6-2103, NO1-AG-6-2106).

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BALANCE ABILITIES IN AN INNER CITY OLDER ADULT POPULATION

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Little is known about balance abilities of older adults from different ethnic backgrounds. The purpose of this study was to describe balance abilities in these older adults. Elders (n=251) with a mean age of 74.3 ± 7.7 years. The majority of the individuals (87.7%) were African-American or Hispanic. Each were screened for past and current medical conditions, confidence and frequency of performing activities and were administered the Berg Balance Test (BBT), Timed Up and Go (TUG), and Multi-Directional Reach Test (MDRT). Mode on the BBT was 53 (maximum =56); mean on the TUG was 15 seconds, and MDRT was 8.9 in. forward, 4.6 in. backward, 6.8 in right, and 6.6 in left. Multiple regression analyses revealed that both frequency and confidence in performing activities contributed to the balance tests. Results of this study can be serve as norms for balance testing in urban-dwelling older adult populations from diverse backgrounds and may be useful for clinicians who are developing health promotion and fall prevention programs.

CONTENT ANALYSIS OF ELDERS SELF-DEFINITIONS OF FEAR OF FALLING D. Gray-Miceli, Center for Aging, University of Medicine and Dentistry of New Jersey, School of Osteopathic Medicine (UMDNJ-SOM), Stratford, NJ 08084.

Fear of falling has been reported in the literature among falling and non-falling older adults. The fear of falling has been studied by means of interviews incorporating closed-ended questions, likert scale items or forced choice responses with subsequent operational definitions emerging from this data. Little is known, however, about the meaning of "fear of falling" to the older adult. Clinically it is important to determine elders' self-definitions of fear of falling as this could foster nursing interventions directed at assisting patients with this fear. Content analysis of statements from elders might lead to a theory, which could be tested empirically.

This secondary analysis examines data originally conducted in a larger study. The design of the original study included a randomized sample of elders, over the age of 65 years, residing in the community. Medical records for 215 ambulatory geriatric clinic patients were randomly selected from 2500 records. Sixty-two agreed to participate and 50 home visits were made. These 50 individuals represent this study sample. Of these participants, 33 described their definition of fear of falling.

Data for this analysis came from a semi-structured interview, which measured functional, cognitive and emotional status, environmental risks, fall history and definitions of fear of falling. Content analysis as developed by Glaser and Strauss was performed by coding responses following a three-step process. Level I coding identified common words used to describe fear of falling; Level II coding synthesized responses to form a theme/category and Level III coding evaluated themes in comparison to definitions in the current literature.

The majority of respondents were female and non-falling. The group ranged in age from 67 to 94 years. Four categories emerged for the definition of fear of falling: physical outcomes attributed to fear; feelings about falling(emotional outcomes); actions to be taken to avoid falls and things to be feared. Nursing interventions for management of fear of falling is presented based on the four categories, which emerged. Previous definitions of fear of falling have been based on closed-ended responses. This new definition is pandimensional, holistic and qualitatively reflects the meaning of fear of falling to elders. Reliability was established by having an independent practitioner perform levels I and II coding.

THE INFLUENCE OF LOWER EXTREMITY MUSCLE FORCE AND JOINT MOTION ON GAIT CHARACTERISTICS IN ELDERLY INDIVIDUALS. JM Burnfield, PT[*], KR Josephson, MPH[†], CM Powers, PhD, PT[*], LZ Rubenstein, MD, MPH[†]. [*]University of

Southern California; [7] VA Medical Center Sepulveda (11E) 16111 Plummer St, Sepulveda, CA 91343.

Impaired muscular strength and joint range of motion have been implicated in contributing to falls and altered stride characteristics in the elderly. The purpose of this study was to examine the relationship between lower extremity isokinetic muscle torque capability, selected kinematic variables, and stride characteristics for a group of elderly, sedentary males. Sixty-five individuals participated (mean age: 74.9 years). Isokinetic strength of the hip, knee and ankle musculature (Cybex 330 Dynamometer), as well as joint motion and stride characteristics (Motion Analysis System using GaitTrak software) were recorded during a self-selected free walking velocity. Stepwise regression analysis revealed that hip extension torque, peak hip flexion angle in loading response, and peak dorsiflexion angle in terminal stance were significant predictors of velocity and stride length and together accounted for 48% (r=.69) and 47% (r=.69) of the total variance, respectively. Additionally, hip extension torque and peak dorsiflexion angle in terminal stance were significant predictors of cadence and together explained 20% (r=.45) of the total variance. The findings of this study highlight the importance of strengthening the hip extensors and maintaining functional range of motion of the hip and ankle to increase stride characteristics in elderly individuals. This information will allow rehabilitation teams to focus their interventions to address gait dysfunction more effectively and efficiently.

ANALYSIS OF MOBILITY IMPAIRMENTS FROM 1968 TO 1992

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A better understanding of mobility impairments over the life span will facilitate an understanding of the disability process later in life. It is important to know to what extent impairments in late life reflect previous impairment. The nationally representative Swedish studies LLS and SWEOLD provide an opportunity to examine mobility both cross sectionally and over a 24 year period. Subjects were asked if they had problems running 100 m, walking 100 m, and going up and down stairs in 1968, 1974, 1981 and 1991/92. A cross sectional analysis of the 1991/92 data (n=5843) reveals a curve of impairment starting in the forties and rising sharply to include a majority of the oldest age groups. Analysis of a longitudinal panel (n=2889, aged 39-85 years in 1992) shows that about 30 percent of the variance in mobility 1991/92 could be explained by mobility in 1968, 1974 and 1981. Of the explained variance, about half was explained by mobility in 1968. Cluster analyses suggests that about three quarters of the panel had no mobility impairments, around five percent had impairments on all waves and the rest acquired problems during the 24 year period. These longitudinal results thus confirm the cross- sectional picture. A further analysis of possible mobility careers suggests that about 10 percent of the panel had impairments that came and went over the 24 year period.

DYNAMIC BALANCE IN OLDER ADULTS: FALLERS AND NON-FALLERS

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The ability to maintain dynamic balance of the upper body during walking is an important factor for assessing postural stability in the older adult. Stability of the upper body during walking is essential as it provides a stable platform for sensory systems. The purpose of this study was to examine upper body stability during walking in older adults to determine factors that may place them at risk for recurrent falls. Fifteen young adults, 15 healthy community dwelling older adults and 5 older adults with a history of falling were tested. Older adults relying on assistive devices were excluded from this study. Subjects walked five passes of a 10 meter walkway at their preferred cadence. Angular displacements of the head, neck and trunk were measured in the sagittal plane. Data were sampled at 60 Hz using an infrared camera system with passive reflective markers. Cadence and average walking velocity were determined. No significant differences in kinematic or temporal variables were found between older adult fallers and non-fallers. Both groups of older adults showed decreased walking velocity as compared to young adults. Additionally, fallers exhibited a significant increase in trunk flexion as compared to young adults. These data indicate that older adult non-fallers adapt their walking pattern by slowing down and can successfully maintain upper body balance. Increased trunk flexion of older adult fallers creates a less stable position of the upper body by displacing the center of mass anteriorly. This upper body position may place them at risk for recurrent falls. *Supported by Temple University Research & Dean's Incentive Funds.*

EPIDEMIOLOGICAL STUDY OF FEMORAL FRACTURES IN INSTITUTIONALIZED ELDERLY SUBJECTS FROM THE CITY OF PALERMO.

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The prevalence of proximal femoral fractures in institutionalized elderly subjects from the city of Palermo, and the subsequent impact on the quality of life were studied.

Twenty nursing homes were visited with an evaluation of a total 346 subjects: 276 females (79.8%) and 70 males (20.2%).

Sixty-three subjects had undergone a fracture (femoral + other sites), corresponding to 18% of the total examined population: 55 females (88%) and 8 males (12%).

Forty-eight femoral fractures were, 44 (92%) in female subjects, and 4 (8%) in males subjects. The mean age of all subjects with femoral fracture was 85.54 (range 66 - 101). Mean age for female subjects with femoral fracture was 85.75 (range 73 - 101), and for male subjects was 83.25 (range 66 - 90). Mean age at the time of fracture was 80.25 (range 50 - 95), 71.25 for males and 80.25 for females.

Five subjects (10.4%) fractured outside the institution, 23 at home (47.9%, 22 females and 1 male) and 20 subjects inside the institution (41.7%, 17 females and 3 males).

The cause of femoral fracture was a fall in 43 subjects (89.6%, 39 females and 4 males). Other causes were not frequent, such as spontaneous fracture (2.1%), road accident (4.2%), and other unknown causes(4.1%).

Femoral fracture in the female subjects was followed by total recovery of motor ability in 32%, assisted deambulation in 52%, bed immobilization in 11%. In the remaining 5% the fracture was too recent to evaluate the consequences on life's impact.

In conclusion the incidence of femoral fracture is statistically greater over 75 years of age. Femoral fractures were often associated to falls, which are frequent events at advanced age due to limited postural control, decreased reaction reflexes, visual impairment, postural hypotension, dementia, etc. Femoral fractures reduced the autosufficiency in a large proportion of subjects.

BALANCE, FALLS, FEAR OF FALLING & GAIT SPEED IN AFRICAN AMERICAN AND CAUCASIAN WOMEN

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While there have been numerous studies of balance and gait in older individuals, few studies have included other than white participants. In this study we compared balance, falls history, fear of falling, and gait speed of African American women (N = 20, M age = 69 years) with an age and activity matched group of Caucasian women (N = 20). Balance was assessed using the Berg Balance Scale and the EquiTest computerized dynamic posturography system. Participants gait speed was assessed walking normally, walking over obstacles of various heights, and during stair ascent and descent. Balance performance and falls history was quite similar across the two groups. African American women, however, reported lower rates of fear of falling then Caucasian women. In contrast, the gait speed of Caucasian women was found to be faster than that of African American women except during stair ascent and descent. Findings are discussed in terms of the importance of including minority populations in balance and gait studies.

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A Simple Mobility Screen to Stratify Older Patients by Physical Disability Level. JM Chandler[1], SA Studenski[2], D Wallace[2]. [1]Merck &CO, Inc.,West Point, PA, [2]University of Kansas Medical Center, Kansas City, KS

A simple 4 level mobility competency screen was developed to stratify elderly individuals into groups with different mobility needs. 162 older adults(mean age 80 yrs, 22% male) were recruited from retirement communities or outpatient medicare HMO clinics. Based on ability to tandem walk 5 steps, rise from a chair w/o arms, and walk >.6m/s, subjects were classified as 1) no limitations 2) mild limitations (failed tandem only) 3)moderate limitations (failed tandem,chair) or 4) severe limitations (failed tandem, chair and gait). Concurrent validation was performed against other measures of function including knee strength (STR: isokinetic dynamometry), balance (BAL: Berg scale), endurance (END:6 minute walk) and self-reported physical functioning (PF: SF-36-PF 10). Linear models were used to assess the ability of the screen to distinguish different levels of function, controlling for age and gender. All 4 measures of function were signifcantly different across mobility competency levels.

mobility limitation	none	mild	moderate	severe	p*
STR(ftlbs)	39.9	30.9	23.3	15.0	<.0001
BAL(0-56)	51.7	48.7	42.6	39.6	<.0001
END (m)	1200	1041	871	475	<.0001
PF(0-100)	77.7	70.3	53.7	35.5	<.0001

*adjusted for age and gender

This simple 4 level mobility competency screen distinguishes groups with very different apparent levels of function. It may be useful in clinical or research settings to target patients for further clinical evaluation or intervention.

Mental Health Needs & Acuity Of Elderly Subacute Nursing Home Admissions

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There is an increase in the use of the nursing home as a short-stay, transitional care and rehabilitation facility. While the focus of care has been on the increasingly complex medical needs of admissions, the psychiatric comorbidities found in this population are poorly described and may pose a significant challenge to providing comprehensive care.

The consecutive admissions to both subacute/rehabilitation (SAR) and long-term (LTC) units of a 514-bed academic nursing home were assessed regarding psychiatric symptoms and acuity. SAR admissions were more likely to suffer from delirium (30% vs. 5%) and adjustment disorders (35% vs. 8%) than those to LTC beds. Dementia (including behavioral disturbances) was far more common among LTC admissions (80% vs. 45%). Depression and anxiety were found in both groups, as was a small percentage of patients with Schizophrenia and Bipolar disorders.

Psychiatric co-morbidities are common among nursing home admissions, both short-stay and traditional long-term. Subacute admissions appear to have a higher percentage of disorders related directly to their medical conditions, and a lower prevalence of dementia. The need for mental health services in the nursing home will remain high, regardless of length of stay.

SUBACUTE CARE: DESCRIPTION OF POPULATION AND PROBLEMS STUDY FOR SHORT STAY RESIDENTS

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In the mid-1980's, the subacute care unit (SACU) emerged for patients being discharged from hospitals but still requiring skilled nursing care. The majority of SACUs are located in nursing homes. Little information is available about the characteristics of short stay residents (SSRs). Findings from a survey of 9 SAC units in the Twin City metropolitan area provide information about SSRs and SACUs. The average length of stay on SACUs was 26.9 days. Thirty percent of SSRs were admitted for orthopedic related rehabilitation, 19% for COPD, 14% for cardiac rehabilitation, 13% for end-stage renal disease, 20% for other medical problems, and 12% for non-orthopedic surgical conditions. Pain was present in 73% of the SSRs, while 51% had depression or depressive symptoms, 46% had urinary incontinence, and 23% had UTI. Units ranged in size from 21 to 84 beds with an average of 36 beds. Average occupancy was 71%. No units employed a GAPN. All of the units indicated they had a discharge planner. The staff to resident staffing ratio ranged from 1:2 to 1:6. These descriptive findings about SAC units indicate the diversity of care problems for which staff must plan care. Interdisciplinary care teams play a key role in helping SSRs rehabilitate and learn to manage their care.

FUNCTIONAL ABILITIES OF FRAIL ELDERLY THAT ENABLE RETURN TO THE COMMUNITY

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Post-hospitalization rehabilitation programs focus on recovery of functional abilities. This study attempts to determine which functional abilities are critical to enable frail elderly patients to return to community (RTC). A prospective convenience sample was selected from 2925 geriatric rehabilitation unit admissions (1993-97). The study population consisted of 282 persons >=65 years who lived independently in the community prior to hospitalization but were believed to be at risk for nursing home placement. They were predominantly female (63%), married (37%) or widowed (54%). Standard evaluations of mental status, depression, nutrition, medication management, bladder management, ambulation and ADLs were administered prior to discharge. 203 subjects (72%) returned to the community at discharge; 44 (15.6%) went to nursing home; and 35 (12.4%) did not complete the study due to hospital transfer or death. Age, married marital status, living arrangement prior to hospitalization, MMSE, nutritional risk, BMI, medication management, bladder management, ambulation and ADLs (bed transfer, dress and toilet) were significantly related to RTC. Stepwise logistic regression demonstrated that bed transfer (p=0.0007) was the single strongest predictor of RTC, followed by the living arrangement prior to hospitalization.

This demonstrates that ADLs, specifically bed transfer ability, is the most important determinant of frail elders' RTC. We think that the proliferation of home health agencies and community services for the elderly during the study period has allowed increasingly frail persons to remain in the community but that the ability to accomplish bed transfers cannot be compensated by home services.

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Life Satisfaction in Cognitively Impaired Post-stroke Elderly

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Objective Fifty-eight post-stroke patients admitted for rehabilitation to Parker Jewish Institute for Health Care and Rehabilitation during 1997 were evaluated for life satisfaction to determine if there was a difference in emotional adjustment for the left vs right CVAs. The Life Satisfaction Index-Z (Havinghurst, Neugarten, and Tobin, 1961) was used to assess dimensions of life satisfaction -- zest vs apathy, resolution and fortitude, congruence between desired and achieved goals, self concept, and mood tone.

Methods English-speaking patients over 65 with >5 years of education, admitted for post-acute stroke care, were included in the research. All could follow 1-step commands with cueing. The average Folstein mental status score was 13.4 (range 0-27,SD=8) and average age was 79 years (SD=7). Patients were interviewed without time restriction, in private, during morning hours. Both patients and families were included in the informed consent process. There was no significant difference in the groups (p<.05) on admission on ADL's, total FIM's, Tinetti balance and gait, SF-36 mental health and vitality scores.

The Life Satisfaction Index was administered by a certified social worker within 48 hours of admission and repeated after 28 days of inpatient rehabilitation. Data was analyzed by an analysis of variance of difference scores from admission to 1 month post-admission.

Results The Life Satisfaction Index was sensitive to differences in change in emotional adjustment for the two groups of CVA patients. Over the month of inpatient rehabilitation, the patients with left CVA showed no improvement (-.6) but those with right CVA showed improved scores (+1.4), p<.05.

Conclusion The aphasias and related disorders associated with left CVA may lead to increased frustration and decreased well-being in post-stroke patients, whereas disorders associated with right CVA may be accompanied by an overall sense of improved well-being.

OUTCOMES OF AN ICU-MODEL APPROACH TO SKILLED NURSING UNIT CARE IN A PUBLIC TEACHING HOSPITAL

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The intensive care unit model of health care delivery evolved in the 1960's as a method of resource utilization and service delivery designed to enhance the outcomes of patients with specialized needs. When patients need intensive care, this care is assumed by the ICU team for the duration of the stay in the unit. We have adapted this model of care and the geriatric medicine team assumes the care of all patients admitted to a 24-bed hospital-based skilled nursing unit. In 1997 there were 312 admissions. The population was frail with a mean Katz ADL score of 3.8/6 and Lawton IADL scores of 2.8/8. 66% of the patients returned to the community and only 7.6% were discharged to nursing homes. 7.7% were transferred to long-term rehabilitation facilities and 16% were transferred to the hospital. 2.6% of the patients died; the majority of deaths were in terminally ill patients.

The geriatric team is knowledgeable in comprehensive geriatric assessment, team function and rehabilitation concepts. This approach has enhanced our efficiency and patient outcomes and allowed us to develop the skilled nursing unit as a quality clinical teaching site.

BRIDGING THE GAP BETWEEN ACUTE CARE AND LONG TERM CARE STAFF EDUCATION.

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Regardless of whether post-acute care is provided in a hospital or a long term care facility, a blending of both acute care and long term care skills is critical to the program's success. Blending the values of two different cultures is challenging. However, the education department within a long term care facility met the challenges successfully.

To transition staff and new recruits,orientation education programs were designed to ensure that the nursing staff understood the philosophy of the post-acute program. This paper demonstrates that just as post-acute programs bridge the gap between acute care and long term care, staff expertise should span the range as well.

THE ROLE OF SOCIAL SUPPORT IN OUTCOMES OF PATIENTS RECEIVING SUBACUTE CARE

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Social Support has been shown to reduce morbidity and mortality and is critical in the maintenance of independence in old age. The purpose of the present study was to examine the role of social support in relationship to outcomes of patients receiving subacute care. The sample consisted of 154 randomly selected patients admitted to a subacute unit between July 1994 and July 1996. Mean age was 76. Discharge to home with caregiver was 77% with 50% of those dependent in all ADLs. One patient had a feeding tube. Mean number of comorbidities was 4. Three year mortality rate was 35%. Thirty day readmission rate was 9% compared to 3% without a caregiver. Discharge to nursing home for patients without caregiver was 50%. Social support was a predictor for disposition and readmission rate. Functional status at discharge was a predictor for survival with cox-regression.

LIVING WITH LONG-TERM EFFECTS OF STROKE: AGE VARIATIONS IN FUNCTIONAL HEALTH TRAJECTORIES

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Life expectancy for stroke survivors has improved dramatically in recent years. However, with increased survivorship has come increased risk of new health problems and secondary disabilities, which can further increase the need for services and the burden on caregivers. This paper reports on an ethnically mixed subgroup of 51 stroke patients, ranging in age from 46 to 85. Mean age at onset was 60, with an average time since injury of 7.2 years. 72% experienced their first disabling CVA prior to age 65. All subjects were part of a larger, cross-sectional study of aging with physical disability, the purpose of which was to examine variations in the natural history of impairment, disability and quality-of-life (QOL) outcomes. Chart analysis and structured interviews were used to generate objective and self-report measures of type and amount of rehabilitation services received, number and type of co-morbidities diagnosed at acute onset, and changes in health and functional status at three points in the stroke trajectory (discharge, "physical best" and current status). Change in functional status was measured in terms of an increase or decrease in the number and severity of ADL and IADL limitations. QOL indicators include depression, social integration, and utilization of health-related services. Preliminary ANOVA models indicate that length of inpatient treatment, number of new health problems and improvement in functional status vary significantly by selected demographic and disability characteristics. Results are discussed in terms of the implications of variations in health trajectories for the development of more age-specific and culturally sensitive intervention programs

SUCCESS OF GERIATRIC REHABILITATION: A DIFFERENTIAL VIEW BASED ON MEDICAL AND PSYCHOLOGICAL VARIABLES

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This research is part of a multi-disciplinary endeavor to investigate the role of medical-geriatric and psychological variables as well as their interactions in relation to success of rehabilitation with older adults. Three core issues are addressed: (1) Short- and long-term description of the course of the rehabilitation process based on geriatric and psychological outcome criteria, (2) description of interindividual variability in these outcomes, and (3) explanation of variability based on a geriatric and psychological predictor variable set. 100 geriatric patients (*M*=78.1, *SD*=7.7, 60-93, Mini-Mental *M*=25.8, *SD*=3.3, 17-30; 34% stroke, 44% fractures, 22% other diseases) were assessed at the beginning, at discharge, and six months after discharge in their home setting. As outcome criteria, the Barthel- and Tinetti-Index as well as subjective well-being indicators were used. Depression and anxiety measures were (among other geriatric and psychological constructs) included at time1 as predictor variables. With respect to our core research issues, the following results were found: (1) A significant gain in geriatric and psychological outcome was observed which remained stable until six months after discharge. (2) All outcomes, but psychological ones in particular, revealed a pronounced interindividual variability. (3) Even after controlling for time 1 measurements and socio-structural and disease-related patient characteristics, psychological variables such as anxiety and depression contributed significantly to the variance explanation of outcomes at discharge and six months after discharge. The implications of these findings with regard to geriatric assessment and the optimization of rehabilitation strategies are discussed.

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REDUCING RESTRAINT USE: ALTERNATIVES FOR DIFFICULT CASES

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Recent literature describes the negative effects of restraints on the elderly in long-term care settings, and calls for preventing or minimizing their use. Little has been presented, however, to describe what alternatives are being used and which of those alternatives are effective and feasible. This study examined restraint use in an inpatient geropsychiatric facility. Alternative interventions were planned for patients who had experienced repeat uses of restraint in response to dangerous behaviors. Alternatives were also developed for patients who had physical devices that provided positioning or support, but that also served to restrain movement. Case examples are reported, to explicitly describe the types of alternatives that were developed, how they were implemented, and the results. Discussion addresses alternatives that are effective and practical. Recommendations are made for further research.

PERSISTENT PAIN-ASSOCIATED BEHAVIORS IN THE NURSING HOME: RESIDENT VERSUS CAREGIVER PERCEPTIONS

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When nursing home (NH) residents are too cognitively impaired or stoic to reliably report pain, the clinician seeks alternate modes of assessment. The main purpose of this study was to determine whether NH residents with persistent pain (PP) effectively communicate their pain using behavioral signals. We focus on those with PP, as these individuals are most apt to go unnoticed. 42 resident-family caregiver-nurse caregiver triads participated. From a list of 26 standard pain behaviors, subjects were asked to identify those the resident engages in when he has pain; residents were also queried 24 hours later. Over half of the behaviors had very good test-retest agreement (kappa ≥ .60), but 25 of 26 behaviors had poor resident-caregiver agreement (kappa < .30). Potential resident contributors to this PP miscommunication include complacence; fear of the "bad patient" label, of excessive dependence and of not being heard; and desensitization. Caregiver contributors may include desensitization, ageism, fear of addiction, devaluation of PP in the face of adequate physical function, lack of "validating" outward physical findings and lack of time to prioritize PP management. Because self-report cannot capture many NH residents who suffer PP, efforts toward improving behavioral communication in the NH are warranted.

URINARY INCONTINENCE IN WORKING WOMEN: COMPARISON BETWEEN AGE GROUPS IN SELF-REPORT OF OCCURRENCE AND IMPACT

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Urinary incontinence (UI) is often overlooked in healthy populations, although it is prevalent in women. A survey was conducted during Summer 1997 with a random sample of half the full-time female employees (N=2000) of a large academic and medical center. It addressed the occurrence, antecedents, workplace impact, and knowledge. 1134 surveys were returned (57%)21 were excluded due to incomplete /missing data. 232(21%) reported at least monthly UI. A higher proportion of women > 50 yrs had UI than younger women (35% vs 17%, p=.01). They also had a higher body mass index (28 vs 26., p <0.05).58% used pads, 38% used voiding schedules and 40% used pelvic muscle exercise to manage UI, as compared to younger women: 59%, 24% and 47% respectively. Both groups reported similar stress and urge-like symptoms. There were no statistical differences in UI management, work impact, or reporting to health care providers. Less than half of the total group reported it and only 2 read the AHCPR Guideline. A majority (81%) indicated need for more information.

A RANDOMIZED CROSSOVER TRIAL OF NIMODIPINE FOR GERIATRIC URGE INCONTINENCE

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To evaluate the efficacy of nimodipine for geriatric urge incontinence, eighty-six participants with irreversible geriatric urge incontinence were randomized to receive nimodipine, or placebo during the first treatment period. Participants received 30 milligrams of nimodipine twice daily for three weeks, and matched placebo twice daily for three weeks, separated by a two week washout period. The primary outcome was number of incontinent episodes, as measured by self completion of a five day voiding record. Secondary outcomes included questionnaires assessing other urinary symptoms, and the psychosocial impact of urinary incontinence.

Seventy-six participants completed the study. There was no significant difference in number of incontinent episodes with nimodipine versus placebo (.03 fewer incontinent episodes with placebo, p = .965, 95% confidence intervals -2.7 to 2.7 incontinent episodes over the five day voiding record). Urinary symptom and psychosocial impact scores were not significantly different with nimodipine versus placebo (P=.068, and .215, respectively).

Based upon the lack of a signficant improvement in voiding records, urinary symptom scores, or psychosocial impact of urinary incontinence, nimodipine is ineffective for the treatment of geriatric urge incontinence. CM20

PEP. A PROSPECTIVE COHORT STUDY DESIGNED TO IDENTIFY THE EVENTS THAT PRECIPITATE FUNCTIONAL DEPENDENCE AMONG COMMUNITY-LIVING OLDER PERSONS.

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Although many of the factors that place older persons at risk for functional decline are well known, little information is available on the events that actually precipitate functional dependence. The purpose of this paper is to describe the Precipitating Events Project or PEP Study, a prospective cohort study of 540 nondisabled, community-living persons 70 years and older. The primary aims of PEP are to identify the precipitating events leading to functional dependence among community-living older persons and to determine the interrelationship between precipitating events and baseline vulnerability for functional dependence. The secondary aims are to characterize the subsequent course of disability in newly dependent elders and to determine whether the severity of a precipitating event is associated with the likelihood of recovery from functional dependence.

Potential participants are randomly selected from the roster of a large primary care practice in New Haven and are sent a letter describing the study. Eligibility is determined during a screening telephone interview. A comprehensive evaluation, including an assessment of baseline vulnerability, is completed in the home among eligible persons. A comparable number of participants are enrolled in each of three vulnerability groups. Participants are then interviewed monthly over the phone for two years using a standardized instrument designed to ascertain potential precipitating events and determine the onset of functional dependence. For participants who are cognitively impaired, a proxy caregiver is recruited to complete the monthly assessments. At one year, information on vulnerability and other cogent participant characteristics is updated during a second, in-home evaluation. The primary analytic strategy will model time to the onset of functional dependence (in months), using survival analysis. Baseline vulnerability (updated at one year) will be a covariate, while the potential precipitating events will be considered time-dependent covariates.

By identifying the events that precipitate functional dependence among community-living elders, this research will lead to an improved understanding of the disabling process and, in turn, will enable investigators to better design effective and efficient strategies to prevent, slow, or reverse functional decline

ARE THERE SEX OR RACIAL DIFFERENCES IN PRESSURE ULCER PREVALENCE ?

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Pressure ulcer prevalence has been reported to differ among sexes and races. Whether this demographic difference is confounded by medical condition(s) is not known.

We reviewed 800 consecutive admissions to a university teaching hospital. Pressure ulcer prevalence was 4%. Pressure ulcers were more common in patients ≥ 65 years old than in patients < 65 years (4.6% vs. 3.4%, p=0.4). Neither sex (3.7% male vs. 4.3% female, p=0.7) nor race (3.5% Caucasian vs. 4.8% African American, p=0.4) was related to the prevalence of pressure ulcers.

The number of medical diagnosis was significantly different between patients with pressure ulcers (12.4 ± 6) and those without pressure ulcers (8.8 ± 5, P<0.001). Pressure ulcers occurred more often in older patients with diabetes (p<0.01) and renal insufficiency (p<0.01) but not in younger patients with these conditions.

Length of hospital stay was significantly longer in older patients with pressure ulcers (12.8 ± 11 vs 6.8 ± 6, p <001) but not in younger patients (6.7 ± 4 vs. 5.6 ± 6.5, p=0.5). In- hospital mortality was not significantly different between patients with pressure ulcers and patients without pressure ulcers (3.1% vs.3.9%, p=0.8).

We conclude that the number and type of medical conditions rather than sex or race are predictive of the presence of pressure ulcers.

MORTALITY AND FUNCTIONAL OUTCOME AFTER HIP FRACTURE OCCURRING IN A LONG TERM CARE FACILITY

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Hip fractures cause significant mortality and functional decline in community dwelling elderly, but the outcome in LTC dwellers is not as well studied. We reviewed 47 LTC residents with hip fractures over two years for mortality and changes in mobility at 6 months. One left LTC and could not be followed. Of the remaining 46, two were not candidates for surgery. 40 (85%) were demented; 74% were female; mean age was 88. All patients had rehabilitation to some degree. Three baseline groups were identified: independent ambulators (IA); ambulators using assistive devices (AD) and nonambulators (NA).

Outcome at 6 months was as follows

Baseline		IA	AD	NA	Died
IA	14	1 (7%)	7 (50%)	5 (36%)	1 (7%)
AD	19	0	7 (37%)	11 (58%)	1 (5%)
NA	13	0	0	10 (77%)	3 (23%)

Mortality rate was low in all groups, but was highest in the NA group (p<0.1). For the entire sample, the median functional status score was significantly lower post-fracture (p<0.01). The 6 month mortality after hip fracture was 11%, but the mobility had declined in the majority. Nevertheless, despite advanced age and dementia, 15/33 (45%) who were ambulatory at baseline were still ambulatory at 6 months.

SIX MONTH OUTCOME OF ELDERLY PATIENTS WHO HAD DYSPHAGIA EVALUATIONS DURING ACUTE HOSPITALIZATION

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Dysphagia is a common problem in NH residents and causes significant morbidity and mortality. Optimal therapy is unknown. We did a retrospective review of 44 patients who underwent dysphagia evaluation by the speech pathologist while hospitalized for acute medical problems. The mean age of the patients was 90, 74% were female. The most common diagnosis was dementia. 20 % had acute stroke. Based on the evaluation, 17 (39%) were found to have high risk for aspiration. 27(61%) had mild to moderate risk for aspiration. All patients at high risk for aspiration had PEG tubes recommended, but only 6 agreed. Overall, 6 month mortality for the 44 patients was 55%. Results were as follows:

Aspiration Risk	High PEG	High No PEG	Mild to Mod
Number	6	11	27
6 Month Mortality	4 (67%)	7 (64%)	13 (48%)
Death From Aspiration	2 (33%)	4 (27%)	4 (15%)

Nursing home residents with symptoms of dysphagia had poor short term outcome. Although the numbers are too small to reach statistical significance, in this population PEG feeding did not alter mortality or prevent death due to aspiration pneumonia. Further study of a larger number of patients is needed to confirm these findings.

FUNCTIONAL PERFORMANCE IS IMPAIRED AFTER COMMUNITY-ACQUIRED PNEUMONIA IN OLDER ADULTS.

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Community-acquired pneumonia is an acute illness the majority of older adults should recover from completely. However, there is evidence that following hospital discharge a significant number of these older adults experience unexpected morbidity and mortality. To examine functional recovery following pneumonia in a group of 26 older adults, we obtained timed manual performance using William's doors test, which has been shown to predict subsequent hospitalizations and death in community-dwelling older adults, at 1 and 3 months following hospital discharge. One month post discharge, 50% (13/26) of subjects required ≥8.6 seconds to complete the five tasks of opening and closing two doors and opening a third, a score associated with increased morbidity and mortality. Three months post discharge, 70% (9/13) of these subjects again scored ≥8.6 seconds, while only 30% (4/13) improved their performance time. Of the 13 subjects who scored <8.6 seconds at one month, 15% (2/13) demonstrated a deterioration (≥ 8.6) of their timed performance at 3 months. These data suggests that a significant number of older adults discharged from the hospital following community-acquired pneumonia may be at risk for subsequent morbidity and mortality.

DESCRIBING USEFUL FIELD OF VIEW USING SENSORY AND COGNITIVE MEASURES

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Useful field of view (UFOV) has been used as a visuo-perceptual measure to predict car accident occurrence and functional mobility in older adults. The purpose of this project was to explain UFOV using sensory and cognitive measures. Thirteen community-dwelling elders aged 74 to 90 (82 ± 5.2) participated in the two-hour protocol. Sensory measures that were collected were: visual acuity (VA) using the Snellen chart, field performance (FP) using the Humhrey field analyzer, and contrast sensitivity (CS) using the Pelli-Robson chart. A general measure of cognition was obtained using the Mini-Mental State Examination (MMSE). UFOV was measured using the attention analyzer to describe UFOV as a percent reduction. VA and CS data used in this study were the bilateral values. FP was entered into analyses using the average between left and right values. The right values were significantly correlated to left values (0.88), validating the use of the mean value in the analyses. UFOV was significantly correlated with VA (-0.66), FP (0.66), CS (0.7), and MMSE (0.7). A step-wise regression analysis was used to predict UFOV as a function of the predictor variables. VA, FP, CS, and MMSE together accounted for 77% of the performance related to variance in UFOV. VA, FP, and CS alone accounted for 55% of the variance. The results suggest that both sensory and cognitive variables represent important predictors for UFOV, validating UFOV as a visuo-perceptual measure, not a pure sensory variable. The implications to practice are that UFOV and other visual and cognitive measures need to be considered for driving and mobility performance and for training protocols.

3-D BIOMECHANICAL ANALYSES OF MID-URETHRAL FUNCTION IN WOMEN

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Because the mechanisms by which an age-related loss of maximum resting urethral closure pressure (MUCP) are poorly understood, we used biomechanical analyses to estimate the sensitivity of MUCP to possible age-related changes in the properties of each of the three concentric layers of mid-urethral muscle. A 3-D, linear elastic, axisymmetric finite element model of the female mid-urethra, complete with three intramural muscle layers, was represented using 1,440 hexahedral elements and analyzed using ABAQUS v5.5. Muscle contraction was modeled as an isovolumetric orthotropic process involving a contractile strain source and a series elastic element. The results show that when the strain source was set at 35%, the inner two layers of smooth muscle contributed 40 cm H_2O, and the outer striated muscle layer contributed 35 H_2O to MUCP. MUCP was found to be twice as sensitive to a given percentage decrease in smooth muscle elasticity as it was to the same decrease in striated muscle elasticity. Likewise, MUCP was 50% more sensitive to a given loss of smooth muscle contractility than to the same loss of striated muscle contractility. We conclude that MUCP is more sensitive to changes in smooth muscle function that striated muscle function. Supported by P.H.S. grants R01 DK 47516 (JAAM) & 51405 (JOLD), and T32 AG00114 (ND).

CORRELATES OF SLEEP APNEA IN THE ELDERLY

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There have been few studies of sleep apnea in elderly populations The purpose of this study was to determine the correlates of sleep apnea in elderly patients evaluated at a sleep center in Honolulu We did a retrospective chart review of 221 patients who underwent overnight polysomnography over a 2 ½ year period, ages 65 to 92 years (mean 72 years). Subjects were divided into 3 groups normal (Apnea Index(AI) <5), mild to moderate sleep apnea ($AI \geq 5, <20$), and severe sleep apnea ($AI \geq 20$) Sleep apnea was significantly associated with male gender (p=0.0003), height (p=0.007), systolic blood pressure (p=0.0006), diastolic blood pressure (p=0.05), and diagnosis of hypertension (p=0.02) Patients on beta blockers were significantly less likely to have sleep apnea (p=0.05) Sleep apnea was not significantly associated with age (p=0.39), weight (p=0.09), BMI (p=0.61), alcohol consumption (p=0.21), or caffeine use (p=0.72). There was a borderline significant association with race (p=0.06), with higher rates of sleep apnea in Caucasians and other Asian/Pacific Islanders compared to Japanese Presence of sleep complaints, including snoring and insomnia, were not significantly associated with apnea index Multivariate logistic regression analyses showed that female gender (Odds Ratio (OR)=0.22, 95% confidence intervals (CI)=0.08-0.64) was significantly protective for sleep apnea, and use of beta blockers (OR=0.33, 95% CI = 0.10-1.03) was marginally protective for sleep apnea Height, weight blood pressure and presence of hypertension was not significantly associated with sleep apnea in multivariate models Our study shows that sleep apnea syndrome in the elderly is significantly associated with gender, and use of beta-blockers appears to be protective Surprisingly BMI was not significantly associated with sleep apnea. This study suggests that correlates of sleep apnea may be different in the elderly compared to younger populations Since sleep apnea is a common problem of old age, these relationships need further study Prospective studies of sleep disorders in the elderly are necessary to identify risk factors

MANUAL FORCE MODULATION, DIRECTION CONTROL, AND TAPPING SPEED IN PERSONS WITH PARKINSON'S DISEASE (PD).

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The control of speed, direction, and force modulation were examined in PDs, and compared to age-matched normal adults. Factors investigated were unilateral and bilateral task conditions, and synergistic versus non-synergistic movements. The participants (N=13) performed three tasks: an index finger tapping task (motor speed and movement reversal ability), a position control task (the ability to control the direction of a thumb and index finger-held joystick), and a force control task (the ability to control low levels of force applied by the thumb and index fingers on two spring levers). MANOVA, ANOVA, and Tukey's HSD tests were performed on RMSE and Time for all conditions. PDs have significantly longer press times ($F=26.33$, $p \leq 0.001$) and inter-tap intervals ($F=15.12$, $p \leq 0.001$), and fewer number of total taps ($F=41.37$, $p \leq 0.001$) on the tapping measure than age norms. The laterality effect for position control showed that PDs are faster ($F=28.00$, $p \leq 0.001$) and more accurate ($F=10.03$, $p \leq$

0.002) when asked to control position unilaterally versus bilaterally. Force tracing is less accurate (F=32.09, $p \leq 0.001$) than position tracing in both unilateral and bilateral conditions. In addition, unilateral force tracing is slower (F=24.10, $p \leq 0.001$) than force tracing bilaterally and both conditions of position tracing. Compared to normals, PDs do not show that synergistic and non-synergistic movements are differentially affected.

Nocturia and Sleep Apnea Symptoms

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Nocturia is commonly viewed as a benign condition but may increase risk of falls or may be a symptom of serious but treatable respiratory disorder, obstructive sleep apnea (OSA). A random sample of 400 community-dwelling elders, balanced by ethnicity and gender, were surveyed by mail for nocturia and OSA symptoms. The return rate was 20% (n=81) with 40% (n=32) volunteering for additional research involvement. Respondents were evenly represented by gender and by ethnicity. Volunteers reported significantly ($p<.01$) more symptoms than non-volunteers: nocturia (M=2.5, range 1-6.5), bladder irritation (M=3.1), naps (M=1.3 /day), apnea symptoms (M=2.2), and sleep symptoms (M=2.2). Volunteers also had a significant relationship ($r=.42$, $p<0.05$) between nocturia and apneic symptoms. No significant associations were found when comparing nocturia, bladder irritation, OSA, and sleep symptoms by age group among either volunteers or non-volunteers. Additionally, comparison of symptoms by gender was not statistically different.

CASE REPORT OF CHRONIC EPISODIC LOW BACK PAIN COEXISTENT WITH A CONTAINED RUPTURE OF AN ABDOMINAL AORTIC ANEURYSM.

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75 year old white lady with past medical history of chronic atrial. fibrillation, CVA,HTN and narcotic dependent post herpetic neuralgia since 1993, called her Primary care physician with complains of low back pain that started few hours previously. Increased intra-abdominal pressure and coughing made it worse. Pain was present all the time, even at rest. Her narcotics were retilled and the X-ray of LS spine showed mild DJD changes. Ice packs and chiropractic manipulations brought brief partial relief. As the pain continued for over three months and was slightly different from her prior episodes, being more severe in intensity an MRI was ordered. It showed a 7.5 X 8.4 cm thoraco-abdominal aortic aneurysm with a contained rupture in the L3 vertebra. She had urgent surgical repair with graft placement. Post operatively she did well

This case illustrates a rare but potentially catastrophic etiology complicating chronic low back pain. Distinguishing features that may alert the physician to this type of etiology are the persistent nature of the pain that was not relieved at rest, and the change in intensity.

Psychosocial Characteristics of Women with UI

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A secondary analysis focused on psychosocial characteristics of urinary incontinence (UI) was conducted with a sample of 286 women who entered the treatment phase of a study to evaluate pelvic muscle exercise as a treatment for UI. The 286 women ranged in age from 28 –89 years (mean 56, SD 12.76). Self-reported urine loss in the past week, rated on a 10 point scale (1=none, 10=a lot) ranged across the scale with a mean of 4.6 (SD 2.6). Symptoms by self-report were most often a combination of stress and urge (83%). The majority (63%) had their present pattern of urine loss for over one year with 26% of these more than five years.

This study contributes to understanding the meaning of UI in women of all ages who have demonstrated health-seeking behaviors. The purpose of the study is to examine relationships among age, selected psychosocial characteristics, symptoms, severity and duration of UI. The psychosocial characteristics measured were Health Locus of Control (range 24-58, mean 41.96, SD 6.57), Self Esteem (range 19-40, mean 32.4, SD 4.38), Quality of Life (range 0-37, mean 8.6, SD 7.26) and a measure of feelings toward UI. Further analysis will examine the differences in psychosocial characteristics by age, the relationships between psychosocial characteristics and wetting factors and the relationship between age, length of time of wetting and psychosocial characteristics. Implications of the study will effect future treatment modalities and assist in understanding how to help women with this life altering condition.

ZALEPLON SAFELY IMPROVES SLEEP IN ELDERLY PATIENTS WITH PRIMARY INSOMNIA.

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Primary insomnia is a chronic sleep disorder that increases in frequency with age. The unique pharmacokinetic and pharmacodynamic profile of zaleplon, a nonbenzodiazepine hypnotic, suggests that fewer side effects will be encountered with its use than are normally associated with benzodiazepine hypnotics. The efficacy and safety of zaleplon (5 and 10 mg) were compared with those of placebo and zolpidem (5 mg), another nonbenzodiazepine hypnotic, in over 600 elderly patients (> 65 years old) with primary insomnia. Sleep variables were assessed with postsleep questionnaires in two multicenter, double-blind, randomized, 2-week outpatient studies conducted in the United States and Europe. The pooled results from these studies demonstrated that zaleplon 5 and 10 mg significantly reduced sleep latency in elderly patients during both weeks of treatment. During week 2, median sleep latency values were shorter with 5- and 10-mg doses by 12.7 and 17.2 minutes, respectively, than with placebo. There was also evidence for increased sleep duration and an improvement in sleep quality during both weeks of treatment with zaleplon. The improvement in sleep with zaleplon was achieved without rebound insomnia and treatment was very well tolerated. No adverse event occurred at a significantly higher rate with either zaleplon dose than with placebo. Thus, zaleplon represents an improved hypnotic that is effective and safe for the treatment of insomnia in the elderly.

DETERMINANTS OF BOREDOM IN THE ELDERLY. Crilly, R.G., Kloseck, M., University of Western Ontario and Cherryhill Community Project, 801 Commissioner's Road East, London, Ontario, N6C 5J1

Maintaining functional independence in old age is a challenge, as is remaining active and avoiding boredom. This study was conducted to test the hypothesis that boredom is largely dependent on health and that improved health will reduce boredom and enhance the quality of life of the elderly. The study population consisted of 2953 residents residing in a 13-building apartment complex (2325 units). A community health questionnaire (seeking information on demographics, health service utilization, perceived health and quality of life) was developed and delivered to each apartment unit. Questionnaires were returned by 1231 residents (53% response rate), mean age 72yrs. ± 15 yrs. S.D. (range 19-96 yrs). As expected, boredom correlated with amount of free time (r = .39), life satisfaction (r = .45) and one's sense of control over lifestyle (r = .44), but only weakly with activity level (r = .13) and ability to leave the apartment (r = .17). Boredom did not correlate at all with age, marital status or living arrangements. There was only weak correlation with the services received, a surrogate for functional independence (r = -.13), and little or no relation to use of physician related health services (e.g.,visits to doctor; visits to ER; hospital admissions; number of medications taken). There was little correlation with common geriatric problems (e.g., falls; memory problems; incontinence; etc.) or whether the subject was a caregiver, or their level of stress. There was significant though weak correlation with self-rating of health (r = .36), and similar correlations with other measures of health and wellness, or one's sense of control over one's health. Stepwise multiple regression analysis was used to determine the predictors of boredom. The final equation was: free time + perceived control over lifestyle + life satisfaction + perceived health + healthy as my peers + frequency of leaving one's apartment = boredom. This equation was significant ($F_{(6,626)} = 52.11$, $p<0.0001$).

In conclusion, boredom in the elderly seems fairly independent of function or health service utilization, but significantly correlates with life satisfaction and one's sense of control over lifestyle. Attempts to allay boredom and improve life satisfaction through a medical or rehabilitation model may have limited success. A more successful approach to reducing boredom may be to place greater emphasis on lifestyle and life satisfaction factors. CM20

Drinking and Cognitive Performance in Elderly Japanese-American Men. The Honolulu Asia Aging Study. C.L. Joseph MD, D. Galanis PhD, K.H. Masaki MD, H. Petrovitch MD, G. W. Ross MD, L. White MD. Honolulu Asia Aging Study, Kuakini Medical Center, Honolulu, HI

Although excessive alcohol intake has long been implicated in cognitive impairment, recent reports have suggested a beneficial association between moderate drinking and cognitive function. In this project, a follow-up to the Honolulu Heart Program (HHP) prospective population based study, which began in 1965, the relationship between alcohol consumption and cognitive performance was explored. Complete information was available for 3,556 participants 71 to 93 years of age. Alcohol intake was measured at HHP Exam III. Cognitive performance was measured by the Cognitive Abilities Screening Instrument (CASI) approximately 18 years later. Multivariate analyses were performed controlling for age, education, migration status, smoking, and history of stroke. Exam III drinkers had significantly better CASI scores than non-drinkers. Heavy drinkers (>60 ounces of alcohol per month) also had lower CASI scores than moderate drinkers. These results suggest moderate drinking in late middle age (one to two drinks per day) may preserve cognitive function in old age.

HOST AGE INFLUENCES THE BIOLOGICAL BEHAVIOR OF CANCER. STUDIES IN PET DOGS WITH NATURALLY OCCURRING MALIGNANCIES. D. J. Waters, D. M. Cooley, D. K. Allen, N. Glickman, L. T. Glickman. Departments of Veterinary Clinical Sciences and Veterinary Pathobiology, Purdue University, West Lafayette, IN 47907

Data from humans and experimental tumor models suggest that host age may influence the development and growth of malignant tumors. Our group has studied the naturally occurring cancers of pet dogs to further understand the factors that contribute to the lethality of important malignancies. The purposes of this study were to determine if host age influences: (1) prognosis for female dogs with breast carcinoma, and (2) likelihood of skeletal metastasis in dogs with prostate carcinoma. Age at diagnosis was determined for 69 female dogs with breast carcinoma that underwent surgical treatment. For each dog, chronologic age at diagnosis was converted to physiologic age using an algorithm that accounts for breed-specific differences in lifespan. To determine if host age influenced the development of prostate carcinoma skeletal metastases, age at diagnosis for 26 dogs with skeletal metastases and 76 dogs without skeletal metastases was compared. In dogs with breast carcinoma, younger dogs had significantly decreased duration of survival than older dogs (p=0.02). Dogs in the youngest quartile of physiologic age were 3.9 times more likely to be dead within 12 months after surgery than dogs in the oldest quartile. In dogs with prostate carcinoma, younger dogs had a greater likelihood of skeletal metastases at time of diagnosis than older dogs (p=0.03). Dogs in the youngest quartile for physiologic age were 4.9 times more likely to have skeletal metastases than dogs in the oldest quartile. Pet dogs with naturally occurring malignancies may serve as an important model to investigate the biological basis for the "young host - biologically aggressive cancer" association.

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UTILIZATION OF WARFARIN IN HIGH-RISK OLDER PERSONS WITH CHRONIC ATRIAL FIBRILLATION

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Older patients (pts) with atrial fibrillation (AF) at high risk for developing thromboembolic (TE) stroke without contraindications to warfarin should be treated with warfarin based on data from SPAF III. A retrospective analysis of charts from 1,563 pts (380 men and 1,183 women), mean age 80±8 years, seen in an academic geriatrics practice during 1997 showed that chronic nonvalvular AF was present in 141 pts (9%). Of the 141 pts with AF, 127 (90%) were at high risk for developing TE stroke because they had prior thromboembolism, a history of heart failure or abnormal left ventricular systolic function,

systolic hypertension, or were women over 75 years of age. Of the 127 pts at high risk for TE stroke, 3 pts had contraindications to warfarin. Of the remaining 124 pts, 61 (49%) were treated with warfarin, 45 (36%) were treated with aspirin, and 18 (15%) were not treated with warfarin or aspirin. These data indicate underutilization of warfarin in older pts with chronic AF at high risk for TE stroke.

WHAT CAN WE DO TO IMPROVE PHYSICAL FUNCTION IN OLDER TYPE 2 DIABETICS?

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Older diabetics are at higher risk for functional impairment than are their age-matched counterparts without diabetes. We sought to identify factors associated with impaired physical function in older diabetics. We studied 1238 type 2 diabetics ≥ 55 years of age enrolled in the Type II Diabetes Patient Outcomes Research Team (PORT) project. Subjects were primary care patients at a large staff-model health maintenance organization. They completed a comprehensive mailed survey that collected information about demographics (age, race, marital status, income, education, gender, body mass index (BMI)), health behaviors (exercise, smoking, alcohol), care and control of diabetes (therapy, self-reported glucose control, home glucose monitoring, disease duration), mood (Center for Epidemiologic Studies Depression Scale (CES-D)), comorbidity, and the Short-Form-36 Health Survey (SF-36).

We evaluated the bivariate relationships between the PFI-10, a 10-item measure of physical function from the SF-36, and independent variables from the domains described above. Variables that were significant at $p<0.10$ were entered into a multiple linear regression model. There were 7 independent predictors of impaired physical function (all $p<0.05$, model R-square=0.41). Immutable factors associated with impaired function were older age, taking insulin (a marker of diabetes severity), and a higher comorbidity score. Potentially modifiable factors were a lack of regular exercise, a greater BMI, abstinence from alcohol, and a CES-D score >20.

In addition to promoting regular exercise and weight loss, the treatment of depression is likely to preserve or even improve the functional status of older diabetics. Moderate alcohol use may be beneficial as well.

DETECTION AND MANAGEMENT OF CORONARY HEART DISEASE IN OLDER WOMEN

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Coronary Heart Disease (CHD) is overwhelmingly prevalent among elderly women, with women outnumbering men as they age. The factors that impact an elderly woman's risk factors, office presentation, outpatient diagnostic test results and response to treatment are often poorly understood by her primary care physician, leading to missed opportunities for prevention, diagnosis and timely treatment. A 1995 Gallup survey showed a knowledge gap among primary care physicians regarding CHD in women: 32% did not know that CHD was a women's leading cause of death, 66% thought that a women's CHD risks were the same for men and 88% believed that CHD symptoms were the same for men and women. By addressing this knowledge deficit, the outpatient diagnosis of CHD in the elderly woman should be improved leading to appropriate prevention and treatment of CHD and its related diseases, such as stroke and peripheral vascular disease, which significantly impact a woman's ability to live independently. This seminar provides information given in a slide lecture format aimed at the primary care physician, complete with participant handouts with copies of slides and references. Attendees will be able to effectively recognize risk factors, offer preventive measures, evaluate symptoms, and perform gender sensitive diagnostic testing for CHD in older populations, thereby decreasing the mortality from CHD among women and improving the quality of life for those at risk of CHD.

AMWA's Education Project on Coronary Heart Disease in funded by unrestricted educational grants from DuPont Radiopharmaceuticals and the National Association of Margarine Manufacturers

FUNCTIONAL STATUS AS A PREDICTOR OF RESPONSE TO TREATMENT FOR BREAST CANCER IN OLDER WOMEN

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Purpose: The purpose of this study will be to assess functional status as a predictor of treatment response in women greater than 75 with breast cancer.

Methods: This will be a retrospective chart review of approximately 140 patients diagnosed with breast cancer. Data was abstracted by a team consisting of a Geriatrician, oncology nurse, and social worker. Abstracted data included age, activity of daily living impairment, family history of breast cancer, living arrangements and cancer stage. In addition treatment modality based on general stage was reviewed.

Results: There were 140 subjects, aged 79.6 ± 3.9 years, who had baseline data; 23 (16%) had ADL impairments; 34 (29%) had a family history of breast cancer; and (48%) lived alone. For breast cancer staging the distribution was as follows: Stage I (44%), Stage II (32%), Stage III (11%), and Stage IV (13%). At one year, 14 of the subjects had died, 111 were alive, and 15 were lost to follow-up. After adjustment for age at presentation, cancer stage, ADL level, living arrangement, and family history for breast cancer, the strongest predictor of death at 1 year was functional status at the time of diagnosis (OR=17.37, $p<.01$).

Conclusion: Functional measures typically gathered in the evaluation of older persons may be helpful in predicting clinical outcomes in breast cancer treatment of older women, and should be considered along with traditional predictors when treatment decisions and prognosis are being evaluated.

IDIOPATHIC THROMBOCYTOPENIC PURPURA IN A NINETY-EIGHT YEAR OLD

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Idiopathic thrombocytopenic purpura (ITP) is an immunological disorder that is characterized by increased platelet destruction . While acute ITP is mainly seen in children, chronic ITP is a disease of younger adults. We describe the case of a 98 year-old resident of a long-term care institution who was diagnosed with ITP.

A 98 year-old lady with dementia, hypertension, osteoarthritis, macular degeneration and breast cancer was noted to have several areas of ecchymosis on her thighs and trunk. Because of her poor general condition, the resident had been on DNR and, a few weeks ago, the family had requested for supportive care only approach to her care with no further investigations or hospitalization, etc. The family did agree to simple blood tests. Two CBC examinations revealed the platelet counts to be 5,000 and 15,000. On clinical examination there were not other abnormalities. Liver and spleen were not enlarged and there was not lymphadenopathy. After a hematological consult, she was started on oral steroid therapy. The family was against any further work-up including bone marrow etc. Within ten days of steroid therapy, her purpuric spots disappeared and her platelet count increased up to 265,000. It is important to remember that almost any condition can first present in late age, even at the age of 98.

SMILES: Multicentric Italian Study on Extreme Longevity. Prevalence of Chronic Diseases

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The Study concluded the first phase of data collecting, the survey of deaths and the collection of follow up data have started. The Centers that participated to the study were 25 and they were divided in 4 groups according to the different living situations taken into account.
We have interviewed 377 people. Their average age was 88.7 (SD =3.3) in a range of 85-101 (214 women 63.9%, 88.7 +/- 3.4, 135 men 36.1%, 88.6+/-3.3)
The interviewes were conducted using a questionnaire that included items for referred diagnosis of the most common chronic diseases. Preliminary data analysis on hypertension (HY), previous myocardial infarction (MI), congestive heart failure (CHF), angina pectoris (AP), chronic bronchitis (CB) and diabetes are shown in the tables below.

Percentage prevalence of chronic illnesses

	Hy			*MI*			*CHF*		
Groups	*Tot*	*f*	*m*	*tot*	*f*	*m*	*tot*	*f*	*m*
1	44.2	56.4	25.4	4.9	3.6	6.9	11.1	11.0	11.3
2	53.9	56.1	50.0	6.6	8.7	3.3	13.2	6.5	23.3
3	43.9	50.0	33.3	8.6	11.1	4.5	13.8	13.9	13.6
4	44.8	50.0	20.0	0	0	0	55.2	54.2	60.0
Total	46.6	54.6	32.6	5.5	5.6	5.4	15.7	15.3	16.4

Percentage of prevalence of chronic illnesses

	AP			*CB*			*diabetes*		
groups	*Tot*	*f*	*m*	*tot*	*f*	*m*	*tot*	*f*	*m*
1	5.5	7.3	2.8	29.7	21.8	41.7	13.1	15.2	9.9
2	9.2	6.5	13.3	25.3	17.4	37.9	14.1	18.4	6.9
3	6.9	11.1	0	41.4	33.3	54.5	21.1	25.7	13.6
4	6.9	8.3	0	17.2	12.5	40.0	20.7	20.8	20.0
total	6.7	7.9	4.7	29.7	21.8	43.0	15.3	18.3	10.2

The SMILES is coordinated by Prof. Vincenzo Marigliano in the Longevity Study Group of SIGG (Italian Society of Geriatrics and Gerontology). Dr.Fabio Campana, Dr.Roberta Annicchiarico, Dr.Evaristo Ettorre, Dr.Walter Gianni belong to the methodology group
Partecipant Centers are 25: UO1 Sassari Dr A. Nieddu, Dr G. Angius, Dr.V.G. Mura; UO2 Vasto Dr F. Guarino; UO3 Noale Dr. A. Bordin, Dr. A. Bellemo, Dr. M. Lo Storto; UO4 Loiano Dr. D. Panuccio, Dr.G Cane; UO5 Napoli Prof. F. Rengo, Dr.L. Forgione, Dr. V. Canonico; UO6 Canosa Dr. S. Astolfi, Dr.M. Cannone, Dr.M. Calitro; UO7 Alba Dr.P. Pieroni, Dr.F. Cravero, Dr. F. A. Fava; UO8 Ancona Prof.E. Paciaroni, Dr.Tomassini; UO9 Acri Dr.F. Florio, Dr.M. Giudice, Dr.V. Ritacco; UO10 Nola Prof. F. Coppola, Dr V. Strocchia; UO11 Troina Prof.F. Feruglio, Dr R.S. Spada, Dr G. Roccasalva; UO12 Modena Dr.R. De Gesu; UO13 Campobasso Dr.C. Dentizzi; UO14 Cesena Prof.P. Sartoni, Dr.D. Burnoli; UO15 Zingonia Dr.S. Mosconi, Dr.E. Petro, Dr.L. Rusconi; UO16 Valle di Maddaloni Prof.R. Cerqua, Dr.M. Califano, Dr.F. Marotta; UO17 Piedimonte S.Germano Dr.F. S. Caserta, Dr.P. Cervera, Dr.D. Fabbrocile; UO20 Viterbo Dr.I. Berni, Dr.P. Ballanni; UO21 Lecce Prof.G. Garzya, Dr.M. Garzya, Dr.G. Lecciso; UO24 Massa Carrara Prof.U. Bola, Dr.B. Bianchi; UO26 Roma Prof.G. Riondino, Dr.A. M. Brancati, Dr.A. Assisi; UO29 Montefalcione Dr.M. Ciarimboli, Dr.P. Grimaldi, Dr.A. Tornatore; UO 32 Cagliari Prof.P.F. Putzu, Dr.E. Maccioni, Dr.O. Catte; UO33 Cosenza Prof.F. Corsonello, Dr.B. Mazzei, Dr.A. Carelli; UO35 Albano Dr.F. Campana, Dr.R. Annicchiarico, Dr.E. Ettorre.

DIAGNOSIS OF MYOCARDIAL INFARCTION BY ELECTROCARDIOGRAPHY

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Electrocardiograms (ECGs) from 1,331 persons (986 women and 345 men), mean age 80±8 years, seen in an academic geriatrics practice were taken and interpreted by a Marquette Medical System MAC 8 machine. These ECGs were reviewed for the diagnosis of Q-wave myocardial infarction (MI) by the computerized ECG, independently by 3 board certified internists (BCIs), and by a cardiologist experienced in interpreting ECGs (WSA). Q-wave MI was diagnosed by the cardiologist in 411 of 1,331 persons (31%). The sensitivity of diagnosing MI was 64% (263 of 411) for the computerized ECG and 90% (368 of 411), 85% (348 of 411), and 84% (347 of 411) for the BCIs. The specificity of diagnosing MI was 99% (911 of 920) for the computerized ECG and 99% (915 of 920), 98% (905 of 920), and 98% (899 of 920) for the 3 BCIs. These data indicate that the diagnosis of Q-wave MI by computerized ECG had a sensitivity of 64% and a specificity of 99% and by 3 BCIs had a sensitivity ranging from 84% to 90% and a specificity ranging from 98% to 99%.

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CAREGIVER SATISFACTION WITH A DEMENTIA EVALUATION PROGRAM AT UNIVERSITY-BASED CENTER OF EXCELLENCE

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Providing quality care to the growing number of patients with dementia is a complex and challenging task for today's health care professional. In the context of a managed care environment, quality of care is largely measured by health outcomes and patient satisfaction. Frequently with dementia patients, it is both the patient and the caregiver who are the recipient of support services and the caregiver who serves in the decision making capacity for their loved ones. Therefore, it is critical to provide services which meet or exceed the expectations of the caregiver and to assess caregiver satisfaction in order to ensure quality of care. To date research on caregiver satisfaction has not been published.

The purpose of this study was to assess caregiver satisfaction with services provided through a university-based dementia evaluation program. The dementia evaluation includes a comprehensive interdisciplinary team assessment by a geriatrician, geriatric psychiatrist, neurologist, gerontological nurse practitioner and social worker. Following the evaluation, a family meeting is held to explain the diagnosis and discuss the treatment plan.

A total of 20 caregivers were included in the study. The Services Satisfaction Scale 30 (SSS 30) was used to measures caregiver satisfaction with access to services, mannerisms of primary care provider, and the outcome of the dementia evaluation. Caregivers were mostly daughters aged 46-55 who cared for their demented mothers outside of their homes. Cognitive status as measured by the Folstein Minimental Status Exam (MMSE) ranged from 16 to 25 with an average of 17.2. Services recommended by the team included daycare, respite, home health, support groups, educational readings, and prescription drugs for memory and problem behaviors. The survey was administered to caregivers 1 to 2 months following the family meeting.

Results indicate that 95% of caregivers were mostly satisfied or delighted with services provided. Ninety percent felt that the primary care provider was highly competent and that the collaboration of the team was good to excellent. Most caregivers did not respond to questions about access to care, although several indicated difficulty with obtaining appointments. Seventy percent reported being mostly satisfied or delighted with information provided about Alzheimer's disease, maintaining caregiver's well being and recommendations to help with caregiver stress. Prescriptions, relief of symptoms and referrals for support services were likewise important outcomes for the caregiver.

In conclusion caregivers were mostly satisfied with primary care provider mannerisms and outcomes of the dementia evaluation program but had issue with accessability to appointments. It is therefore necessary to address accessability of appointments in order to improve the quality of services provided.

FUNCTIONAL REACH AS A PREDICTOR OF DEATH

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Functional reach, the distance a person can reach forward while standing unsupported, is a physical performance task designed to assess balance. The ability of functional reach to predict death over five years was examined using data from the 3rd in-person interview of the Duke site of the NIA's Established Populations for Epidemiological Studies of the Elderly (EPESE) and mortality data from the National Death Registry through June 1997. 73% of the cohort (n=1865) were able to perform functional reach. Four levels of reach were evaluated. Multivariable logistic regression yielded odds ratios (OR) adjusted for gender, age, and health status:

Reach category	OR (95% CI)
reach ≤ 6 inches	2.6 (1.6-4.3)
6 inches < reach < 10 inches	2.1 (1.4-3.0)
10 inches ≤ reach ≤ 12 inches	1.8 (1.2-2.7)
reach > 12 inches	1.0

A functional reach of ≤ 12 inches was associated with increased risk of death. A dose-response relationship existed: progressively smaller reach distances were more predictive of death. This study provides evidence for the predictive validity of functional reach. Functional reach is a simple marker of functional decline which could alert health providers to examine intervention options to prevent premature death.

FOOD PYRAMID SELF-EFFICACY SCALE (FPSES): A PILOT TO TEST RELIABILITY AND VALIDITY

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Dietary factors are associated with 5 of the 10 leading causes of US death; CAD ranks highest being the major regardless of gender in people over the age of 65. Of the modifiable risk factors for CAD, 2 of 4 pertain to food choices. Although lifestyle habits can enhance or impair health, people's beliefs that they can motivate and regulate their own behavior (self-efficacy) plays a crucial role in whether they even consider changing detrimental health habits. The purpose of this study was to determine the FPSES reliability and validity. 30 post-operative CABG pts completed: FPSES, DETERMINE, SIP. Mean age 70.4. Readability of the FPSES revealed Flesch Reading Ease (88.9) and Flesch-Kincaide Grade Level (3.8). FPSES test-retest ($r = 0.78$, $p = 0.008$); coefficient alpha = 0.92. Six content experts judged the FPSES (CVI = 0.85). Construct validity of the instrument was achieved through hypothesis testing, ($r = -0.37$, $p = 0.05$). 29 of 30 scored moderate to high nutritional risk; supporting nutritional screening and promotion of lifestyle changes to decrease risk. Not only does this pilot support the use of the FPSES; findings show significant implications for an APN working with similar groups of patients. As many of the health problems associated with the elderly are preventable or controllable through health promotion; it is vital that measures exist to determine a person's confidence that he or she believes in the ability to change to healthy eating behaviors.

THE IMPACT OF RACE ON THE RELATIONSHIP OF DEPRESSION AND BONE DENSITY IN AN ELDELRY COHORT

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Recent evidence has shown that depression is associated with low bone mineral density (BMD) in young women; however this relationship has not been established in older men and women or in African Americans. By examining depression and BMD in the Cardiovascular Health Study (CHS) we were able to establish if these associations exist among the elderly, and if they vary by race. The CHS is a multisite population study examining the risk factors for cardiovascular disease in an elderly cohort. Depression was measured using the CES-D while BMD was assessed using the Dexa bone scan (N=674). Using multiple regression models, we adjusted for known confounds of both depression and bone density: weight, age smoking, alcohol use, gender, estrogen use, and physical activity. Depression was significantly inversely associated with BMD ($p=.0001$, partial $R2=.13$, $R2=.36$). After stratifying the same model by race, depression was negatively associated with BMD in both Caucasian and African-Americans ($p=.0033$ and $p=.0095$). However the model explained 81% of the variance for African Americans (depression partial $R2=.26$) and 25% of the variance in Caucasian-American (depression partial $R2=.12$). Post hoc analyses using least square means revealed that blacks with high CES-D scores had significantly lower total BMD than whites with high CES-D scores. Depression may be more closely associated with low BMD, and risk of osteoporosis, for elderly African Americans than for elderly Caucasian Americans, even accounting for known risk factors of low BMD.

MEMORY AWARENESS AMONG JAPANESE NURSING FACILITY RESIDENTS

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This study investigated the metamemory components of achievement, capacity, change, locus, and strategy among Japanese elderly living in six geriatric health facilities in Tokyo. A total 117 subjects (32 males, 85 females, M = 83.08 years of age participated. Cognitive levels--impaired (M = 21.14, n=57) and nonimpaired (M = 26.55, n = 60), were determined by MMSE scores. The incidence of depression as measured by the Geriatric Depression Scale was 73.5%. There were no differences in metamemory between the two cognitive groups; however, the impaired group had significantly fewer years of education than the intact group. When subjects were divided into three groups by depression levels, (none, mild, and severe) the none depression group was significantly different (F = 10.405, p < .01) on locus, and the mild depression group was significantly different (F = 4.397, p < .05) on the strategy scale. Females scored significantly higher on achievement.

RELATIONSHIP BETWEEN PHYSICAL ACTIVITY RECALL AND FREE-LIVING DAILY PHYSICAL ACTIVITY IN OLDER CLAUDICANTS R.B. Otis, A. Brown, C.J. Womack, T. Fonong, A.W. Gardner, Div. of Gerontology, Claude Pepper Center, U. of Maryland, and GRECC, Baltimore VA Medical Center, Baltimore, MD 21201.

The purposes were to determine the relationship between values obtained from the peripheral arterial disease-physical activity recall (PAD-PAR) questionnaire and (1) the free-living daily physical activity obtained from the doubly labeled water technique, and (2) clinical measures of PAD severity. Fifty-one older PAD patients (Age = 70 ± 6 years) were recruited. Energy expenditure of physical activity (EEPA) was determined using doubly labeled water and indirect calorimetry techniques. PAD severity was measured by ankle/brachial index (ABI) and maximal pain distance determined during a graded treadmill test. The physical activity values obtained from the PAD-PAR questionnaire (113 ± 37 MET-hrs/wk) was not found to be related to EEPA (542 ± 260 kcal/day; r = -0.057, p = 0.690), ABI (0.64 ± 0.19; r = 0.032, p = 0.826) or maximal treadmill pain distance (376 ± 229 m; r = -0.054, p = 0.731). We conclude that the PAD-PAR questionnaire is not related to either the the free-living daily physical activity or to PAD severity in older claudicants.

Supported by NIA (P60AG12583 and K01AG00657).

Self-Rated Health and Depressive Symptoms among Community-Dwelling Stroke Survivors

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Depressive symptoms are considered to be the most common post-stroke psychiatric conditions, which negatively affect both patients' disability and mortality. The purpose of this study was to identify variables that predict depressive symptoms of community-dwelling stroke survivors. Another goal was to determine whether self-rated health adds to prediction of depressive symptoms after statistically eliminating the differences of demographic factors and functional status. 833 community-dwelling stroke survivors were identified from the first wave of Assets and Health Dynamics among the Oldest Old (AHEAD) national survey. Depressive symptoms were measured by Center for Epidemiology Studies Depression Scale (CESD). Independent variables included demographic variables: age, gender, marital status, race, education, family assets; functional status: ADL and IADL impairments, cognitive condition, incontinence, pain perception; and self-rated health. The results indicated that stroke survivors have significantly higher CESD scores than non-stroke community-dwelling elderly. The result of hierarchical regression analysis indicated that self-rated health explains an additional of 4.32% of variance of depressive symptoms after the differences in demographic factors and functional conditions have been statistically eliminated. Overall, the model used explains a total of 28.8% of variance of depressive symptoms. Health professionals and stroke caregivers should measure self-rated health for assessment and prevention of depressive symptoms of community-dwelling stroke survivors.

NUTRIENT INTAKE ADEQUACY AND SUPPLEMENT USE AMONG AN OLDER POPULATION ON THE EASTERN SHORE OF MARYLAND: THE SEE PROJECT

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Adequate nutrition has a beneficial effect on health. Individuals obtain nutrients from combinations of foods and from supplements, which constitute different nutrient intake patterns. Other studies describe high prevalences of inadequate intake of some key nutrients in groups of older adults, which may make them more vulnerable to disease. These older adults are more vulnerable than if their nutrition were adequate. The purpose of this study is to estimate the prevalence of inadequate nutrient intakes among 2,886 individuals 65 to 84 years old, a representative sample of the elderly residents in Salisbury, MD. This cross sectional survey uses a food frequency questionnaire to estimate usual intakes of several nutrients. Estimates of prevalence of inadequate nutrient intakes were calculated using the probability approach and the nutrient requirements for adults 51 y and older. On average, white participants of both genders reported higher mean energy and nutrient intakes than blacks. Zinc had the highest estimated prevalence of inadequacy (>40%), followed by vitamin E, calcium and vitamin B_6 (>30%). Vitamin C and folate had the lowest estimated prevalences of inadequacy (<20%). In this population, there are differences in estimated prevalences of inadequate nutrient intake by race and by nutrient intake pattern. Many older adults in this population have inadequate nutrient intakes. For some, supplement use alters this situation.

IDENTIFYING ADL CHANGES IN THE EARLY STAGES OF COGNITIVE IMPAIRMENT

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The diagnosis of cognitive impairment but no dementia, or CIND, has been used when cognitive impairments are identified on clinical examination and/or neuropsychologic assessment but the criteria for the diagnosis of dementia are not met. One criterion that is often unmet is that of functional impairment, although this typically relies on self or proxy reports of ADL abilities. Our understanding of whether persons with CIND demonstrate changes in their functional abilities is limited. We assessed 44 well, 24 CIND, and 36 Alzheimer's disease (AD) subjects at home using the MMSE and the Assessment of Motor and Process Skills (AMPS), an observational assessment which generates ADL motor and process ability measures. The OARS ADL scale and Barthel Index were completed either on the basis of self or proxy reports. Stage of impairment was categorized independently using the Global Deterioration Scale (GDS). Significant between-group differences were found for the MMSE and AMPS ADL process skill measure. Only the AMPS process scale and the MMSE differed between persons at GDS stages 2 and 3 (the point at which changes in cognition become evident on objective assessments) and between persons at Stages 3 and 4 (the point at which the diagnosis of dementia is made). Subjects' AMPS ADL motor ability measures did differ between subjects in the early and moderate stages of dementia (GDS Stage 4 and 5). Self and proxy reports of function did not identify persons with CIND or early AD. (Supported by the Alzheimer Society of Canada)

FUNCTIONAL INDEPENDENCE FOLLOWING STROKE

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The Functional Independence Measure (FIM), introduced in 1987, was developed from the well known Barthel Index. The FIM goes beyond the basic activities of daily living assessed in the Barthel with the inclusion of two communication and three social cognition items. Since 1987 the FIM has been used extensively in the stroke population. A search of the research literature of the past ten years was undertaken. Research studies were found providing normative FIM values during the acute phase of care, at the time of inpatient rehabilitation admission and discharge, as well as at six months post-stroke. There is very little acute care normative data but a wealth of information from research during inpatient rehabilitation. Thus the bulk of the data represents a minority of the total stroke population and ignores the largest group, the 70% of patients discharged home. This information suggests many important opportunities and challenges for health care personnel involved with post-stroke patients.

CORRELATES OF DELAY TO NEUROPSYCHOLOGICAL REFERRAL IN AN DEMENTED POPULATION

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Evidence exists that persons showing signs and symptoms of cognitive decline are referred for neuropsychological testing after a long lapse of time. We aimed to identify factors correlated with the delay between the onset of cognitive symptoms and the referral for neuropsychological testing and diagnosis in an outpatient demented population. We studied 154 patients with dementia attending the Memory Clinic of our University from Jan '95 - Jan '98. The mean time to diagnosis was 14.1 ± 10.3 months. When subject with no ADLs impairment were considered, cognitive performance did not differ between patients with short (≤ 6 mo.) or long (>6 mo.) time to diagnosis (MMSE score = 24.3±5.3 vs. 25.8±4.9, respectively). On the contrary, when physically dependent subjects were studied, patients with shorter time to diagnosis had a significantly better cognitive status than those who were referred later (MMSE score = 15.5±6.8 vs. 11.3±5.4, $p=0.041$). It is concluded that the level of pre-existing physical function influences the time to diagnosis in patients showing signs and symptoms of cognitive decline.

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WHY MORE PATIENTS OF THE NEAR ELDERLY GRUOP PRAYED THAN THE ELDERLY FOLLOWING CARDIAC SURGERY? CHANGING SOCIAL ROLE MAY MATTER.

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Research has found that religious coping is commonly used by the American elderly. A general perception has been that older people pray more than younger people. The present study followed up on previous investigations of spiritual well-being, religiosity, aging, and health. In recent years, issues related to psychological adjustment following Coronary Bypass Surgeries (CABG) have been voiced. Yet, little is known about the relationship of religiosity to psychological adjustment after CABG. A survey addressed multifactorial determinants of post-operative psychological recovery and the effects of using prayer on the recovery of 151 patients (ages 40 to 80). We hypothesized that the use of prayer would reduce psychological distress and depression one year following CABG. Information was collected from three sources of data for each patient: a computerized database from the Medical Center and the two mailing questionnaires at 6-month and one year following the surgery. Of 196 patients in 1993 who have returned the 6-month follow-up of their post-CABG cardiac condition, 77% completed the second questionnaire. Results showed that most patients prayed about their postoperative problems and that prayer significantly decreased depression and general distress one year post-CABG, even after controlling for depression in the month following CABG in ANOVA and recursive path models. Inconsistent with population studies, more near eldely patients prayed than the elderly. This indicated an important role of patients' appraisal of the challenge in use of prayer for distress that might be related to the changing status of employment after CABG.

CORRELATES OF PLASMA FIBRINOGEN IN PRE- AND POSTMENOPAUSAL WOMEN

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Fibrinogen is a powerful independent risk factor for CVD. The purpose of the study is to examine the associations between plasma fibrinogen levels and other CHD risk factors including fibrinolytic factors such as tissue plasminogen activator, plasminogen activator inhibitor 1, and lipoprotein(a) in pre- and postmenopausal women. A cross-sectional analysis was performed in 458 premenopausal women (age 40.6±5.5) and 279 postmenopausal women (age 56.4±4.3) with no HRT. In premenopausal women, fibrinogen was positively correlated ($p<0.05$) with % body fat ($r=.29$), PAI-1 ($r=.27$), tPA ($r=.23$), age ($r=.17$), Lp(a) ($r=.16$), glucose, systolic BP, TG, and LDL, and negatively with VO_2max ($r=-.19$) and HDL ($r=-.12$). But only the associations with PAI-1 ($r=.17$), Lp(a) ($r=.14$), tPA ($r=.09$), and VO_2max ($r=-.11$) remained significant after simultaneous adjustment for age and % body fat. In postmenopausal women, there were weak correlations between fibrinogen and age ($r=.19$), tPA ($r=.19$), glucose ($r=.14$) and HDL ($r=-.12$) levels. After adjustment for age and % body fat, the associations with tPA ($r=.19$) and glucose ($r=.13$) remained significant. It would appear that fibrinogen is biochemically and physiologically related to many CHD risk factors and the relationships are very different between pre- and postmenopausal women.

Visceral Adipose Tissue: Validity of Anthropometric Prediction Methods. C. Nuñez, RC. Lee, A. Pietrobelli, A. Kovera, F. Rubiano & S.B. Heymsfield. Obesity Research Center, St.Luke's/ Roosevelt Hospital Center, New York, NY, 10025.

Aging is associated with an increase in visceral adipose tissue (VAT). This has important implications since increasing level of VAT is a risk factor for cardiovascular diseases. Anthropometric indices (body weight (BW), waist, hip, W/H, sagittal diameter (SD)) provide simple, noninvasive estimates of VAT, but there is limited data regarding their validity in the assessment of VAT in older normal weight subjects. The present study examined the association between VAT measured by multislice magnetic resonance imaging (MRI) and anthropometric measures in 30 ethnically mixed women ranging in age from 50 to 88 years; mean, Body Mass Index (BMI) = 26.2 kg/m^2. The results of the zero order-correlational analyses (R's) are presented in the table.

	BW	Waist	Hip	W/H	SD
VAT	.67**	.78**	.65**	.45*	.81**

*$p< 0.05$, **$p<0.001$

These preliminary results demonstrate that VAT is well correlated with anthropometric indices, particularly SD, demonstrating the highest correlation. We conclude that SD may be a better predictor of VAT in older, normal weight women than any of the other anthropometric measures presented in this study.

THE BEHAVIOR AND ACTIVITY PATTERNS OF THE PHYSICALLY RESTRAINED NURSING HOME RESIDENTS Ali Ahmed, Alan Stevens, and Louis Burgio, Division of Gerontology and Geriatric Medicine, 933 South 19th Ave., Suite 219, University of Birmingham at Alabama, Birmingham, AL 35294.

Computer-assisted, real-time observational data of 69 nursing home residents were examined to explore the effects of physical restraints on their behaviors. Between the hours of 8:00 a.m. and 8:00 p.m, each resident was observed for twenty-four, 30 minute periods over 4 weeks. Variables related to restraint use were: disruptive vocalizations (DV), the presence of others in resident's immediate environment, and the proportion of time resident was engaged with environmental stimuli. The 69 residents were divided into three groups, defined by the percentage of observation time during which they were restrained: frequently restrained (FR) (>75%; n=7), moderately restrained (MR) (25-75%; n=12), and infrequently restrained (IR) (<25%; n=50). The mean percentage of time FR, MR and IR residents were restrained was, 88%, 40.1%, and 0.6% of the observation period, respectively. Consistent with the prior reports, FR residents demonstrated the highest mean percentage of DV (8.4%) while IR residents the least (5.8%). The FR residents were also more often 'alone' than MR or IR residents, 32.2%, 23.8%, and 19%, respectively. Interestingly, FR residents were also more likely to be 'engaged with environmental stimuli' (e.g. dolls, magazines, mail, books, etc.) (16.3%) than the IR residents (1%). Regression analyses are planned to further investigate the relationships between physical restraints and residents' behaviors, activity and cognitive status.

CLINICAL USE OF THE MODIFIED ORDINAL SCALE OF PSYCHOLOGICAL DEVELOPMENT (M-OSPD)
J. Quach, L. Liu, S. Warren, M.Miyazaki, Faculty of Rehabilitation Medicine, G.Griener, Bioethics Centre, University of Alberta, 2-64 Corbett Hall Edmonton, AB, Canada, T6G 2G4

In this study, the Modified Ordinal Scales of Psychological Development (M-OSPD), designed by Auer and Reisberg (1995), was used to assess residual abilities in people who have advanced Alzheimer Disease (AD). The developers of this test have established very good inter-rater reliability. They have also examined the validity of this test by comparing scores on the M-OSPD with levels of the Functional Assessment Staging (FAST) (Auer et al., 1994). The M-OSPD appears ideal for use with clients in the late stages of AD because it does not require any language skills to perform. More validity studies is warranted in order to establish its clinical utility.

We conducted a pilot study using 5 participants (2 males, 3 females) in the late stages of AD in order to determine the clarity, length, respondent burden and feasibility of a larger study. Although staff and family queried the subjects' abilities to participate in testing, 4 of the participants had scores ranging 13 to 32; only 1 subject scored 0 out of a maximum of 50. Three of the subjects were alert and not tired at the end of the testing session. The time required to administer the M-OSPD ranged from 15 to 45 minutes, and only 1 subject required 2 sessions to complete the test. These results suggested that it would be feasible to proceed with a study using 30 subjects to examine the concurrent and construct validity of the M-OSPD.

(The first author is supported by the Royal Canadian Legion Fellowship and the Canadian Occupational Therapy Foundation)

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THE BROOKDALE NATIONAL FELLOWSHIP PROGRAM
SYMPOSIUM - DIVERSITY IN AGING RESEARCH

C. Blaum, Dept. of Internal Medicine, Univ. of Michigan, 33 N. Ingalls, #3A00, Ann Arbor, MI 48109-0405
N. O'Brien, The Brookdale Foundation Group, 126 E. 56th Street, New York, NY 10022

Participants:

S. Brooks (Univ. of Michigan) Muscle Atrophy and Weakness with Aging: The Role of Contraction-Induced Injury.

G. Chatta (Univ. of Arkansas Medical School) Induction of immunity to rat prostatic acid phosphatase and rat prostatic steroid binding protein: implications for prostate cancer immunotherapy.

K. McGarry (Dept. of Economics, Univ. of California, Los Angeles) Social Security, Economic Growth, and The Rise of Independence of Elderly Widows in the 20th Century.

R. Ray (Dept. of English and Inst. of Gerontology, Wayne State University) Gender Influences on Life Story and Adult Development.

M. Silverstein (Univ. of Southern California, Andrus Gerontology Center) Styles of Grandparenting in the United States.

A major strength of research in aging is the importance and respect that researchers from diverse disciplines and backgrounds accord each others' work. The goals of this symposium is to showcase such diversity in research supported by the Brookdale National Fellowship Program. Although the research presented differs in discipline, from the humanistic to social science to basic biomedical research, all the presenting scientists are concerned with major issues and themes in gerontological research. From the biomedical perspective, Chatta and colleagues describe immunological methodologies that may lead to improved treatment for prostate cancer. Silverstein and Rice explore the importance and heterogenity of grandparenting styles, while McGarry and Schoeni describe the association of the growing independence of widows with income growth. Ray explores gender differences and the relationships of late-life development to life story interpretation, while Brooks and colleagues present insights derived from an animal model of conditioning in aged muscles, work potentially valuable in solving the mystery of frailty. The research presented illustrates how different scientific approaches are necessary to address the challenges of aging for people and for society.

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GENDER STYLES AND WELL-BEING IN TWO STUDIES OF MEN AND WOMEN DIVERSE IN AGE, RACE, CLASS, AND FAMILY STATUS.

B.F. Turner, Gerontology Center, University of Massachusetts Boston, Boston, MA 02125-3393.

Participants:

B.F. Turner (Gerontology Center, University of Massachusetts Boston) Multidimensional Gender Identity Styles and Well-Being in Two Diverse Adult Samples.

M.H. Huyck (Institute of Psychology, Illinois Institute of Technology, Chicago, IL 60616) Gender Styles and Health Among Middle-Aged Men.

K.N. Corrazini (Gerontology Center, University of Massachusetts Boston) Contextual Characteristics of Styles of Masculinity Through the Years.

D.J. Schulman (Gerontology Center, University of Massachusetts Boston) When Women Feel Inadequately Feminine: Themes and Age Variations.

P. Silva (Gerontology Center, University of Massachusetts Boston) Gender Styles and Self-Esteem Among Women Over Age 65: Case Studies.

Discussant:

L.E. Troll (Medical Anthropology Department, University of California San Francisco, San Francisco, CA 94117).

Until the 1980s, gender researchers usually assumed that people defined their masculinity and femininity in terms of personality traits. Cutting-edge definitions and measures of masculinity and femininity include several dimensions besides traits, such as physical characteristics, interests, role behaviors, recreational activities, and more. The newer multidimensional measures, however, are inappropriate for older adults. To generate multidimensional measures useful in adult life-span research, Huyck's Parkville study and Turner's Boston area study of 863 adults applied the same set of gender style measures to qualitative responses. Symposium presents gender style factors applicable to adults varying in age, race, class, and marital and parental status; delineates the gender style factors' relationships to well-being and health; and describes the contextual characteristics related to high or low scores on each gender style factor.

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COMMUNICATION IN A CHANGING SOCIETY: TRANSDISCIPLINARY STUDIES OF LANGUAGE AND AGING

T. Hamaguchi, Georgetown University, 1659 45th St., NW, Washington, DC 20007, and P. A. Saunders, Gerontology Center, 4089 Dole, University of Kansas, Lawrence, KS 66045-2160.

Participants:

T.Y. Arbuckle, D. Pushkar, M. Peled, P. Basevitz, (Centre for Research in Human Development, Concordia University, Montreal, Canada H4B 1R6) Impact of off-target verbosity on get-acquainted conversations.

O. N. Gould, C. Saum , & J. Belter, (Department of Psychology, North Dakota State University, Fargo, ND 58105-5075) Gender differences in reactions to patronizing speech.

A. R. Bower, (Philadelphia Geriatric Center, Philadelphia, PA 19141) Research discourse with elderly speakers: Three theoretical perspectives.

P. A. Saunders, (Gerontology Center, University of Kansas, Lawrence, KS 66045-2160) Depression and ethnicity as personal and social constructs of life stories.

T. Hamaguchi, (Georgetown University, Washington, DC 20007) Structural breakdown and topical continuity in a life story.

H. Hamilton, (Georgetown University, Washington, DC 20057) On narrative traces in conversations with an Alzheimer's patient.

The new cohort of elders in today's society are experiencing diverse demands on their communication skills and competence. This symposium examines the ways in which elders communicate inter and intra-generationally. Using a transdisciplinary perspective, this symposium examines the ways in which communication skills of elders get articulated across multiple contexts. Given the diversity of the elder population many factors need to be targeted such as cognitive status (normal, depressed, AD), social factors (gender, ethnicity), speech activities (experiments, spontaneous and structured conversations, narratives), and analytical measures (quantitative, qualitative).

The aims of this symposium are: (1) to describe communicative performance of older adults, (2) to show how elderly identities and aging ideology are manifested in social interaction, and (3) to refine theoretical frameworks of communication and aging research. Discussions of similarities and differences among these studies will advance our understanding of how communication is conceptualized in the study of aging and by elders themselves.

Papers in this symposium will contribute to identifying new areas of research and practice in the field of communication and aging.

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NATIONAL SAMPLE SURVEYS: WHAT HAVE WE LEARNED FROM RECENT SURVEYS ABOUT HOW TO ASK QUESTIONS OF THE OLDER POPULATION.

E. Crimmins, Andrus Gerontology Center, USC, Los Angeles, CA 90089-0191

Participants:

J. Weeks (National Center for Health Statistics, Hyattsville, MD) Interviewing the Elderly Lessons from the Longitudinal Studies of Aging

R. Lu, E. Crimmins, & T. Seeman (Andrus Gerontology Center, USC, Los Angeles) Measurement of Hypertension in Sample Surveys of the U.S. Elderly Population

E. Zelinski (Andrus Gerontology Center, USC, Los Angeles) Subjective Memory Ability is Not the Same as Objective Memory Performance

S. Stewart, E. Zelinski, & T. Seeman (Andrus Gerontology Center, USC, Los Angeles) Measuring Cognition in Large National Surveys

Discussants:

W. Rodgers (Univ. of Michigan, Ann Arbor, MI 48106-1248)

M. A. Preston (Andrus Gerontology Center, USC, Los Angeles)

In recent years we have undertaken a number of large national longitudinal studies which are designed to reinterview samples of the elderly population periodically over a number of years. The AHEAD, the NLTCS, and LSOAI and II are examples of these surveys. Over time these surveys have grown in scope and complexity and the amount of time required to complete them. Analytic models require the measurement of an increasingly large array of concepts, often concepts which were once thought unmeasurable in large surveys. This symposium will discuss what we have learned about balancing data collection and respondent burden in the production of quality data. It will suggest areas of inquiry that place heavy demands on older respondents and methods for alleviating such burden. Insights will be provided by persons involved in three major data collection efforts. Participants will assess the current methods of measuring cognitive ability and disease presence, two concepts measured in almost all major surveys of the older population.

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NEW PATTERNS OF AGING: CROSSING BOUNDARIES WITH SOCIAL RELATIONS.

T. C. Antonucci, University of Michigan, Ann Arbor, MI 48109.

Participants:

J.E.Lansford & T.C. Antonucci (Dept. of Psychology, University of Michigan, Ann Arbor, MI 48109). FAMILY INFLUENCES ON BEST FRIENDSHIPS IN THE UNITED STATES & JAPAN.

M.J.Levitt & J.D.Santos (Dept. of Psychology, Florida International University, N.Miami, FL 33181). THE MOTHER-IN-LAW RELATIONSHIP: IMPLICATIONS FOR TRANSFORMATION IN THE SOCIAL CONVOY.

E.Vandewater & H. Akiyama (Dept. of Human Ecology, University of Texas, Austin TX 78712 and Dept. of Psychology, University of Michigan, Ann Arbor, MI 48109). RECIPROCITY OF SOCIAL SUPPORT IN THE "SANDWICH GENERATION" AT MIDLIFE.

L. Schaberg & T.C. Antonucci (Dept. of Psychology, University of Michigan, Ann Arbor, MI 48109). THE RELATIONSHIP BETWEEN SEX-ROLE ORIENTATION, SOCIAL RELATIONS AND WELL-BEING ACROSS THE LIFE-SPAN: A STUDY OF TWO CULTURES.

A.Tarnowski & H. Akiyama (Dept. of Psychology, University of Michigan, Ann Arbor, MI 48109). SOCIAL RELATIONS AND THE TRANSITION TO RETIREMENT.

In this symposium we examine the association between social relations and different roles, life transitions and interactions. These papers go beyond the simple description of social relationships in different cultures or under different life circumstances to explore those characteristics of social relationships which have the most positive influence on the psychological well-being and quality of life on the individual.

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PSYCHOLOGICAL AND PHYSIOLOGICAL OUTCOMES OF CAREGIVING: A COMPARISON OF AFRICAN AMERICAN AND WHITE CAREGIVERS. K.H. Namazi, P.Higgins, University of Texas Southwestern Medical Center, Dallas, TX, 75235, and M.L. Wykle, Case Western Reserve University, Cleveland, OH, 44106.

Caregivers of elderly persons often experience psychological or physical distress due to the responsibilities of the caregiving role. Our previous work demonstrated that in a random sample of caregivers, African Americans experienced significantly less burden than Whites, as measured by Zarit's Burden Scale. The literature suggests that African American caregiver stress may be captured by other psychological, physical or health variables. The objective of the present study was to determine effective outcome measures for the stresses of the caregiving experience. The sample included 393 caregivers of elderly persons (African Americans =136) that were a part of a longitudinal study initially collected through random digit dialing. To measure psychological distress, we used the 20 item CES-D Depression Scale and a scale of 6 items measuring somatic symptoms from the Wheaton-Langer Scale. Recognizing the literature that finds poorer health and more chronic conditions among the African American population, we used a 4 item health scale from the NHNES survey to examine the effects of caregiving on the changes in physical health conditions. While controlling for age, gender and education, African American caregivers continued to demonstrate less psychological stress than White caregivers, on both the depression and somatic scales, and also had fewer changes in their physical health as a result of providing care for an elder. The results of this study call for additional research to uncover measures that will better explain the stressors of African American caregivers.

Predictors of Physical and Mental Health and Health Promotion Behaviors of Black and White Informal Caregivers. L. M. Allen-Holmes, Univ. of Texas - Houston, Houston TX 77030 & May Wykle, School of Nursing, Case Western Reserve University, Cleveland OH 44106

An earlier study to examine the factors that influenced health promotion behaviors of informal caregivers indicated that race was a significant predictor of the criterion variable when depression, anxiety, and health promotion behaviors were the dependent variables. The intent of this study was to determine if the study variables have more explanatory power for one of the groups. The random sample was composed of 391 individuals (83.9% female, 34.8% Black, 65.2% White) providing at least five hours of care to an impaired elder living in a community setting. The amount of explained variance in anxiety and depression was not statistically significant for the Black caregivers. For the White caregivers, the observed variance in anxiety (adj. R^2 = .05, F [7, 220] = 2.67, p = ≤ .05) and depression (adj. R^2 = .05, F [7, 220] = 3.35, p = ≤ .01) was significant. ADLs, IADLs, gender, self-assessed health, and anxiety were statistically significance in explaining health promotion behaviors among the Black caregivers, combining to account for 21% of the variance (F [11, 110] = 3.94, p ≤ .001). In the sample of White caregivers, disruptive life events and anxiety accounted for 13% of the explained variance in health promotion behaviors (F [11,199] = 3.95, p ≤ .0001). Summarily, differences exist between the groups of informal caregivers in the factors explaining differences in measured levels of anxiety, depression, and health promotion behaviors. Delineation of factors most influential upon health promotion behaviors of Black and White informal caregivers is essential in order to design meaningful intervention studies.

Subtly Similar Race and Gender Differences in Caregiving. Sharon M. Wallsten (Duke University School of Nursing, Box 2231, Durham, NC 27710)

This research compares caregivers, care-recipients, and controls on measures of health, affection, perception of stress, and social supports, with a special emphasis on gender and race effects. The data were collected from 118 caregiving and 116 control spousal couples interviewed in their homes in the first year of a longitudinal study. African American (rather than Caucasian) and male (rather than female) caregivers appear to deal with potentially greater stressors, the former because of their own health and the latter because of their spouse's health. African Americans reported greater numbers of health problems, greater interference from their health problems, and greater difficulty with their Activities of Daily Living than did Caucasians. Males cared for recipients with greater numbers of health symptoms than female caregivers, received less help in every care domain, and (unlike female caregivers) maintained a high level of affection for their spouses. Yet, African Americans and males reported higher positive and lower negative impact ratings and lower psychosomatic symptoms and depression scores than Caucasians or females, respectively. Moreover, race was correlated with psychosomatic symptoms with Caucasians having the more severe scores.

WHO HELPS WITH IADLS--DOES RACE/ETHNICITY MATTER? S. Feld, R. Dunkle, T. Schroepfer, & C. Parry. School of Social Work, University of Michigan, Ann Arbor MI, 48109-1106.

Prior work on marital status and co-residence as key factors in helper patterns has not focused on their relevance for various racial/ethnic groups. Often only Black and White elders are studied or all Hispanic are combined. We studied racial/ethnic variations in helpers among currently

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married and unmarried elders, using the representative national AHEAD sample of persons 70 years of age or older. White non-Hispanic, Black non-Hispanic, and Mexican American elders with at least one IADL limitation were compared. The spouse was the predominant helper for both White (>80%) and Black married elders (>60%), but not for Mexican American elders (<50%), for whom co-resident children were key helpers. Unmarried elders in all groups were less likely to rely on co-residents for help, with Mexican American elders most likely to rely on non-resident children. Results are discussed in terms of Litwak's task specificity model and the match between IADL task requirements and social networks of these racial/ethnic groups. Funded by NIA grant T32-AG0017.

RACE AND ETHNIC VARIATION IN FILIAL RESPONSIBILITY NORMS AMONG OLDER PERSONS

Jeffrey A. Burr and Jan E. Mutchler, Department of Sociology, SUNY-Buffalo, Buffalo, NY 14260.

We employ data from the National Survey of Families and Households to explore race and ethnic differences in attachment to norms of filial responsibility among a sample of older persons. Specifically, we examine differences among Blacks, Hispanics, and Whites with regard to their agreement with statements about types of support that *ought* to be given (coresidence and financial aid) and whether the parent or adult child generation *ought* to provide these types of support. We find that older Blacks are more likely than older Whites to agree that adult children should provide coresidence if the parent needs that help, but little difference exists between these groups with respect to attitudes about the provision of financial aid. In addition, we find that older Hispanics are typically not different from older Whites on attitudes about intergenerational coresidence, but Hispanics are more likely than Whites to agree about the appropriateness of providing financial aid between parent-child generations when there is a need. We also show that for actual living arrangement behavior, race differences (Black vs White) are eliminated when attitudes about coresidence are controlled.

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FACTORS RELATED TO LIFE-LONG EXERCISE ADHERENCE IN MEN AGED 40-84 YEARS.

E. M. Jowers, M. A., and W. W. Spirduso, Ed.D., Department of Kinesiology and Health Education, The University of Texas at Austin, Austin, TX 78712.

Since physical activity decreases with each increasingly older decade, examining older adults who maintain high physical activity levels may provide insight as to the factors that underlie exercise adherence. A unique subject population (N=191) of highly active, male rowers (40-84 yrs) who have adhered to a life-long exercise program were surveyed to determine their amount and intensity of physical training, motivations for remaining physically active, and their social support systems. The purpose of the study was to identify which personal and/or environmental factors could predict the amount and intensity of physical training. The average training level was 5 times/week, 50 minutes/day, at moderate to high intensity. Unlike aged-based norms for older adults, these adults demonstrated mean heart rate (56) and mean blood pressure (122/76) values similar to that of trained young. Age, BMI, perceived health, and intrinsic motivation (personal factors); support from spouse, family, friends, and professionals (environmental factors); and combined total social support were the factors examined. Kruskal-Wallis one-way ANOVAs indicated no age differences in personal or environmental factors of adult rowers. In addition, all the factors were predictors in a linear multiple regression analysis to predict physical activity level. The degree to which the adult exercisers participated in physical training was not predicted by any of the personal or environmental factors (personal factors, R = 0.10; environmental factors, R = 0.12; and total social support, R = 0.05). Whereas prior research has shown social support to be an integral part of maintaining adherence to physical activity, these adult rowers report having little to no social support. The primary reason for being physically active was enjoyment, across all ages. Implementing programs that focus on enjoyment may serve to increase physical activity levels of older adults.

*MARS is supported in part by Concept II Incorporated

The Effects of Strength and Flexibility Training on Self-Esteem in Older Women

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In spite of the recent contributions to our understanding of the exercise-self-esteem relationship from a conceptual and psychometric perspective (Sonstroem et al., 1994), few studies have focused on the differential effects of exercise on esteem outcomes over time. Further, whether these temporal relationships support the more contemporary hierarchical and multidimensional models of self-esteem is not known. The present study examined the extent to which a 12-week strength training (N=24) or flexibility (N=29) program influenced self-esteem at the global, domain (physical self-worth), and sub-domain (attractive body, sport competence, physical condition, and strength) levels. Participants (Mage=73 years) completed measures of self-esteem prior to and following the exercise interventions. Repeated measures multivariate analyses of variance with condition as the between subjects factor and time as the within subjects repeated measures factor were employed to examine changes in the three levels of esteem over the course of the programs. Although there was no effect for exercise condition, there were significant multivariate effects for time at all three levels of analysis. Specifically, participants in both exercise groups demonstrated significant increases in global esteem ($p<.05$) and physical self-worth ($p<.0001$), as well as enhanced perceptions of esteem at the subdomain level ($p<.0001$). These data support a multidimensional model of self-esteem, in which physical activity appears to have a positive influence of self-esteem at multiple levels in older women. The extent to which social, behavioral, and physical factors may mediate such changes has yet to be determined.

GENDER DIFFERENCES IN PROGRESSING HOMEBASED EXERCISE DOSE: A GROWTH CURVE ANALYSIS

T.H. Lin, A.M. Jette, Roybal Center Consortium, Boston University, Boston, MA 02215

Progression in exercise dosage remains one of the challenges in home-based exercise training with older persons. In this analysis, our two research objectives were: 1) to examine the relationship between dose and time during a 26-week home exercise study, and 2) to examine the gender difference in change of exercise dose over time. The subjects were 102 disabled elders who participated in a home exercise intervention consisting of 10 exercise routines performed using elastic bands of varying thickness to provide individuated resistance to each movement. Dose was measured by the level of resistance weighted/exercise frequency. Information on dose was provided by biweekly exercise calendars. Growth curve models were used to measure the effects of time and gender by time interaction. Results revealed a quadratic time effect on exercise dose with subjects increasing their exercise dose over the 26-week intervention. Time by gender interaction was also significant, which indicated male and female have different dosage patterns over time. Thus, individual quadratic curves were fitted for older men and female. While there was no gender difference in initial exercise dose (mean=10.95 for men, 9.38 for women), men increased their dose more rapidly than women through the intervention. These findings are useful in guiding the design of future intervention aimed at optimal effective exercise dose and incorporation of gender difference.

USING A DISABLEMENT SCHEME TO CLASSIFY CHANGES WITH EXERCISE IN THE FRAIL ELDERLY

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Washington University, St. Louis, MO 63110.

Few researchers have studied perceived changes experienced by the frail elderly in response to exercise training. The purpose of this study was to use the Nagi Scheme of Disablement as a framework for classifying perceived changes to exercise. Physically frail, community-dwelling participants (N=54, aged 82.1±4.3, 42 female, 48 White) were assigned to 9 months of either an intensive or a home exercise group. The intensive group (n = 32) participated in a supervised program 3 times/week involving 3 months each of flexibility, strength, and endurance. The home group (n = 22) was instructed to do flexibility and balance exercises 3 times/week at home. Once each month all participants responded to an open-ended question, "What changes (good or bad) have you noticed because of your exercise?" Responses were coded into the disablement categories of impairment, functional limitation, disability, and intraindividual and extraindividual factors. Within the impairment category, more intensive exercisers than home exercisers reported greater fatigue (p=.04), more pain (p=.04), and increased strength (p=.04). Within the functional limitation category, more intensive exercisers reported better sleep than home exercisers (p=.05). Within the intraindividual factors categories, more intensive exercisers reported enjoyment (p=.05) and more home exercisers reported feelings of accomplishment (p=.02) than their counterparts. Participants in the intensive group perceived more changes in response to exercise training than participants in the home group. Classifying these changes using a disablement model may help health professionals understand what the elderly perceive as beneficial. Supported by NIA, Claude D. Pepper OAIC AG13629 and NINR, F32 NR07221.

CORRELATES OF THE RETIREMENT SATISFACTION OF OLDER ADULTS IN MIDDLETOWN, U.S.A.

David C. Morris, Ph.D., Department of Sociology. Research Associate: Centers for Gerontology and Middletown Studies, Ball State University, Muncie, IN 47306.

"Retirement as a mass phenomenon is a modern industrial creation" (Kart 1996). It appears that like marriage, retirement has become one of those widespread social expectations. Hayward, Friedman, and Chen (1998) note that while it may be tempting to surmise that retirement is becoming "deinstitutionalized," indeed there may be factors that contribute to the broadening of the institution of retirement.

In any event, as Ekerdt (1989) notes, retirement has become the major normative occurrence in the second half of life. Furthermore, retirement before age 65 is a prevailing expectation if not an entitlement. Atchley and others draw our attention to the fact that retirement is a complex process and not just a singular event.

This study examines the level of retirement satisfaction of 422 randomly-selected older adults (ages ranging from 60 to 97). The research (telephone interviews) was conducted within that classic community setting of the Lynds' "Middletown" (Muncie, Indiana).

Most older Middletowners see themselves as being in good health, physically active, satisfied with their financial resources, and satisfied with life. Of the 312 retirees, over 91 percent expressed satisfaction with their retirement. Some 63 percent would choose to retire when they did; 7 percent earlier, and 30 percent said later. Retrospectively, 75 percent would still retire if given the choice.

Multiple regression analysis of 17 variables on RETIREMENT SATISFACTION yields an $R=.5192$; ($R^2=.2696$). Five variables (LEVEL OF SADNESS, AMOUNT OF EDUCATION, AMOUNT OF SOCIAL CONTACT, HAVING ACHIEVED LIFE GOALS AND SELF-HEALTH CARE) account for most of that variation ($R=.4829$; $R^2=.2332$). It may be of interest to note that there was no statistically significant difference in LIFE SATISFACTION between retirees and those not retired. A path model has been developed to explore the more complex interrelationships between retirement satisfaction and the independent variables.

PREFERENCE FOR WORK AFTER RETIREMENT: AN EXAMINATION OF THE PREDICTORS.

M. A. Cavanaugh, Cornell University, 393 Ives Hall, Ithaca, NY 14853.

Demographic changes and changes in the labor force participation rate of older workers reveal that older workers are comprising a larger proportion of the workforce. These changes have resulted in a shift in the way older workers are perceived (from the perception of older workers as "deadwood" to the perception of older workers as a valuable labor source). Given this shift, employers may be interested in the factors that predict the preference of older workers to remain in the labor force after retirement. Therefore, the purpose of this study was to examine the relationships among job and work attitudes and retirement perceptions and the work preference of older workers. The sample included 2,742 Wave 1 Health and Retirement Survey (HRS) respondents. The results of a probit analysis indicate that job and work attitudes and retirement perceptions are significantly related to the preference to continue working after retirement after controlling for financial and health, company, labor market, and personal constraints. These findings provide insights into the practices that organizations can utilize to attract and retain older workers.

AMERICAN AND BRITISH ACADEMICS TALK ABOUT RETIREMENT. Lorraine T. Dorfman, The University of Iowa, Iowa City, IA 52242.

Most research on retirement has been quantitative in nature and presented in aggregate form. This study, in contrast, uses qualitative case materials to let retirees describe the retirement experience in their own voices, and thus convey the variety, quality, and richness of the individual retirement experience. In more than 400 tape-recorded interviews with retired and retiring professors collected over a ten-year period in the United States and the United Kingdom, the study addresses basic issues in the retirement process, including preparation for retirement, where to live after retiring, evaluation of the retirement experience, and activity patterns in retirement. Respondents were professors from a large public research university, three liberal arts colleges, a comprehensive university (all in the Midwest) and two old civic universities in the United Kingdom. Content analysis categories were constructed on the basis of the open-ended questions, and individual responses were coded into appropriate categories by two independent coders who listened to the tapes (inter-rater reliability = .78 to .98 on all items). Excerpts from the tapes illustrate several major themes: most academics across institutions in both the U.S. and the U.K. prepared for retirement, adapted well to retirement, continued some professional activities in retirement, were involved in a wide variety of service and leisure pursuits, and remained in their preretirement communities. British retirees talked less about financial planning and more about loss of facilities and professional services than did their American counterparts. Implications are discussed.

OCCUPATIONAL STRESSORS AMONG WORKING WOMEN AGE 40 AND OVER

W. M. Neece, R. O. Hansson, Psychology Department, The University of Tulsa, Tulsa OK 74104

This research assessed the nature and extent of occupational stress among 120 working women (age 40-66 years, 60% in professional or managerial positions). Occupational stress was measured by the Women's Organizational Stress Scale (WOSS), a reliable measure developed for this research and based on two earlier studies. The WOSS exhibited high reliability among this over 40 population (alpha=.92). Factor analyses produced five factors. Items in Factor I involved issues of frustrating, unfair treatment, discrimination, and abuse by management. Factor II involved stress associated with supervisory challenges and workload. Factor III reflected experiences of sexual harassment. Factor IV reflected the strain of balancing work and family. Factor V involved organizational circumstances that tend to increase workload stress. The prominence of discrimination in this factor structure is especially interesting, given the high occupational and organizational status of women in the sample. The data suggest, that even at more senior levels of the organization, women are likely to face a number of employment related stressors not fully shared by men. Construct validity for the WOSS was demonstrated by significant correlations with measures of global stress, control, and gender discrimination.

WHY OLDER WORKERS' COMMITMENT TO JOB MAY NOT PROLONG THEIR EMPLOYMENT B. R. McIntosh & N. L. Danigelis, Center for the Study of Aging, U. of Vermont, Burlington, VT 05405

Existing literature on older workers has focused primarily upon identifying the determinants of retirement and predicting organizational exit (notable exceptions include: Doering, Rhodes & Schuster, 1983; and some chapters in Crown, 1996, and Schaie & Schooler, 1998). Given the paradox that the U.S. workforce is healthier and living longer but also retiring earlier (Beck, 1996; Hudson Institute, 1997), it is important, in the face of current and anticipated worker shortages, to identify those worker attitudes and organizational characteristics that prolong employment (Merggenhagen, 1994). Specifically, this identification must be within the context of a single internal labor market (Sorensen, 1997). This study is based on mail survey responses from older (45+, n= 216) and younger (<45, n= 294) workers in a moderate-sized New England firm. Chi-Square and ANOVA tests show older workers are more likely to be satisfied with their jobs (p<.005) and feel the work they do is important (p<.001) than do younger workers. Despite these indicators of their job commitment, older workers are less likely to believe there are opportunities for advancing their careers (p<.005). Possible reasons include: Older workers are less likely to report (1) being cross-trained (p<.02), (2) being expected to periodically perform the duties of co-workers (p<.02), and (3) being encouraged to do their jobs in new and different ways (p<.01) than are younger workers. Findings are discussed in terms of continuity theory (Atchley, 1989), the busy ethic (Ekerdt, 1986), and career theory (Arthur, 1992; Arthur, Hall & Lawrence, 1989).

EFFECT OF THE WORKER ROLE IDENTITY ON POSITIVE TRANSITION INTO RETIREMENT. D.C. Siebert, E.J. Mutran, D.C. Reitzes. Center on Minority Aging, Campus Box 3465, University of North Carolina, Chapel Hill, NC 27599-3465

As the baby boomer cohort prepares for retirement, large numbers of working women will be facing this transition for the first time. Our study, *Roles and Self*, surveyed 753 full-time working men and women aged 58 to 64 who live in the Raleigh-Durham-Chapel Hill area of North Carolina, and examined the factors contributing to positive perceptions of retirement both prior to retirement and again at 24 months postretirement. Using hierarchical regression analysis, we learned that being a woman, being married, expecting a pension and having a strong role identity as a worker were significant in explaining positive expectations of retirement. However, by 24 months postretirement, only receiving a pension and maintaining a positive worker role identity remained significant. At both baseline and 24 months postretirement, identity as a worker was by far the most influential variable. These results support the importance of the worker role identity to positive retirement transition, and highlight the similarities and differences that working men and women may experience during this transition. The National Institute on Aging supported this research.

ETHNIC DIFFERENCES IN SUBJECTIVE RETIREMENT THE INCONSISTENCY WITH OBJECTIVE WORK STATUS

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Ethnicity, like gender and social class, not only influences chances and constraints we encounter in life but also shape self-concepts and ways other people respond to us. Thus, choices and definitions between work and non-work may vary with race. Lifelong "in-and-out" work patterns, amount of underground work and kin- or church-based exchanges, and cultural differences, make it harder to define work and retirement of ethnic minorities. Conventional definitions of retirement based on experiences of middle-class white males often mask the diversity of experiences.

The study was to explore prevalence, incidences, and correlates of ambiguity in retirement definitions across three ethnic groups (whites, blacks, and Mexican Americans) by examining how subjective and objective retirements correspond. A category of "partial retirement" is also included to capture diverse work patterns of ethnic minorities.

A model which accounts for ambiguity in retirement definitions for three ethnic groups is tested using the Health and Retirement Survey. The sample has 7797 whites, 1730 blacks, and 506 Mexican Americans.

The effect of personal attributes on ambiguity in defining retirement vary with race. The ambiguity occurs when one self-defined as partially retired for all groups. Relative to others, Mexican Americans were more likely to work no hour even if they self-defined as "not retired at all".

The experience in divorce, separation, or widowhood was associated with ambiguity in defining retirement for Mexican Americans and blacks. Being laid off and self-employed created ambiguity in defining retirement for whites and blacks but not for Mexican Americans, who may hold different norms and interpretations toward the experiences. Earnings did not reduce ambiguity in defining retirement for Mexican Americans and blacks, which may be related to kinds of jobs they hold over life course.

Blacks with disability were less likely to have ambiguity in defining retirement. It is consistent with literature, which indicates the "adoption of sick role" of blacks. Mexican Americans born outside of US were more likely to have ambiguity in defining retirement, which indicates socialization in a culture with a different way of defining retirement.

It is important to increase our awareness on how retirement is defined. Variations in definition yield variations in program eligibility, participation, and coverage. Re-conceptualization of retirement among ethnic minorities should reflect the heterogeneity of experiences.

VOLUNTEERING IN LATER LIFE PREDICTORS AND CONSEQUENCES FOR HEALTH AND WELL-BEING

Participants

N D Peters (Beaver College, 450 S. Easton Rd., Glenside, PA 19038) & C J Burant (Case Western Reserve University, 11100 Euclid Ave., Cleveland, OH 44106) Older Volunteers Model Development and Testing.

M A Musick (Institute for Social Research, University of Michigan, Ann Arbor, MI 48106) & J Wilson (Department of Sociology, Duke University, Durham, NC 27708) Volunteering by Retired Persons Boon or Bane for Health and Well-being?

Disengagement theory argued that later life is characterized by declining energy, which in turn leads to withdrawal from social involvement and important social roles. Although this perspective on aging has been largely discredited, a variety of questions remain regarding the predictors and consequences of productive activities among older adults. These posters provide more information on these issues as they relate to one type of productive activity volunteering. Earlier work on volunteering is suggestive of the factors that predict whether and how often older adults volunteer their time to formal organizations. A smaller body of work has shown that volunteering may also have positive consequences for the health and well-being of older volunteers. These posters draw on this earlier work and attempt to address both of these issues using a variety of data sources, modeling strategies, and analytical techniques. Such a combination of research should increase our understanding of these important processes.

ORGANIZATIONAL WISDOM

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A study of 116 working adults, age 19 to 73, examined how theoretical formulations of individual wisdom (Baltes, 1993) might be useful in understanding wisdom in work organizations. Co-workers nominated as "wise" were perceived to exhibit characteristics in five organizationally important domains: (1) respect for human diversity, (2) practical political acumen, (3) sensitivity to the organization's culture, (4) respect and consideration for co-workers, and (5) comfort with uncertainty and problem-solving. In addition, respondents indicated in their own words (1) how they believed such characteristics of organizational wisdom were acquired, and (2) the value of wise persons to an organization. Content analyses of responses indicated a 5-factor model by which organizational wisdom is acquired, i.e., through (1) diversity of experience within work organizations and in life more broadly, (2) a balance of intelligence and practical knowledge about the organization, (3) curiosity and life-long involvement in learning, (4) attentiveness to and empathy for coworkers, and (5) the developmental influence of spiritual-humanistic values. Wise persons were perceived to add value to organizations by providing (1) stability and (2) unity under conditions of stress, (3) helping to create a civil and humane workplace through virtuous (and often unrecognized) efforts, (4) a culture of equity, and (5) vision and leadership.

Pre-Retirees without Health Insurance: Self-Employed vs. Wage-Workers.

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Universal health insurance system does not exist in the United States. Uninsured pre-retirees, with declining health as they approach old age, are an especially vulnerable group that could face large and uncertain medical bills. Research on the working population has identified risk factors for people lacking health insurance using four major theoretical frameworks: employment context, human capital, rational choice, and life course perspectives. A gap in the research literature exists for information about health insurance coverage of pre-retirees and how their choice of work activity affects coverage. Data were from the Health and Retirement Survey 1992. Results from t-tests indicate that the self-employed pre-retirees have a higher percentage of health uninsured than the wage-workers. They also tend to be older, married, white males who have more human capital, work part-time in smaller firms, and are less prepared for retirement. After adjusting for self-selectivity bias, results from logistic regression indicate that self-employed who are Asians, Indians or Natives, not having a high school degree, not in professional and managerial occupation, and have no retirement plans are more likely to have no health insurance of any kind. Factors which predict wage-workers without health insurance are: being younger, Hispanics, Asians, Indians or Natives, have no high school degree, have favorable self-rated health, have less household income, work in skill or agricultural industry, work in a small firm, less experienced, have no union membership, work as part-time, have no retirement plans, and believe they will receive social security benefits. Findings indicate factors affecting health insurance on the wage-workers are not always affecting the self-employed. Further research on health insurance should take one's choice of work activity into consideration.

ORTHOPAEDIC SURGEONS, THEIR SPOUSES AND RETIREMENT

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While research on physicians and retirement has been scant at best, specific research on orthopaedic surgeons and retirement is almost non-existent and research on their spouses is virtually non-existent. The purpose of this study was to survey orthopeadic surgeons and their spouses to determine predictors of post-retirement adjustment and effects of retirement on their physical and emotional well-being.

300 surgeon and spouse pairs completed a questionnaire designed to collect both quantitative and qualitative data. While responses on life satisfaction, changes in life satisfaction, time spent with spouse since retirement were not significantly different for surgeons or their spouses, significant differences were found for physical health since retirement (surgeons reporting better health) and in the qualitative data. Specifically, surgeons reported that freedom from schedule, more time to travel, more time with family and less responsibilities as the four most rewarding aspects of retirement, while spouses reported more time with family and freedom to travel and freedom from schedule as their most rewarding aspects. Of particular interest were results regarding the most challenging aspects of retirement. Surgeons reported loss of role as the most challenging (32.5 %) followed by lack of activities (20.4%) and failing health (17.7%), compared to 45% of spouses reporting interactions with family as the most challenging aspect of retirement followed by failing health (10.4%) and financial concerns (9.4%). Similar to the general literature on post-retirement adjustment, the best predictors of life satisfaction were the surgeon's health status and the relationship with their spouse. It appears that for this group of surgeons and their spouses pre-retirement planning especially concerning issues of loss of role, finding appropriate activities and preparing for the increased time interacting with family would be particularly beneficial.

The Economic Status of Older and Younger SSDI Applicants: Trends and Their Implications for Social Security Reform:

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For a sample of disabled men who became Social Security Disability beneficiaries in 1982 and survived to 1991 we examine family income and the incidence and correlates of being below the near (1.5 times) poverty threshold. We compare these men with a sample of nondisabled men drawn from the PSID and weighted to achieve demographic comparability. We focus on the effect of entering the SSDI at different ages on economic status in a single year and how this group of disabled fared over time relative to their nondisabled peers. We examine the implications of their disability status for their well-being as they age. The disabled are a relatively poor group, but with significantly higher rates of poverty observed among those who enter the role at younger ages. By 1991, as the nondisabled begin to retire, the well-being gap between those who entered the roles at older ages and their nondisabled peers narrowed significantly. By 1991 30% of both older groups were either poor or near poor. For the younger groups, their 47% rate was nearly twice that for the nondisabled. A multivariate analysis show that the effect on well being of being young when first receiving SSDI benefits is strong, and persists over the 10 year period. This age pattern carries two implications. It suggests that, in spite of its progressive benefit formula, SSDI benefits have a greater effect in reducing the probability of being poor or near poor for recipients who entered the rolls when they were older than they do for those who became disabled earlier in life. Second, it suggests that those who become disabled earlier in life are disadvantaged by sacrificing the experience-related earnings growth that has accrued to the nondisabled. We find that those who first receive SSDI benefits early in life are disadvantaged relative to their nondisabled peers both in terms of their own income over time and in marriage probabilities and their wives' earning capacities. These disadvantages are likely to persist into their "retirement" years. Older disabled workers compared to their retired peers are in fact advantaged by a shorter wage averaging period and the absence of early retirement reductions. We estimate for both older disabled recipients and their nondisabled peers the advantage of receiving SSDI relative to (waiting for) early retired-worker benefits. We simulate the change in this advantage under higher OASDI retirement ages.

RETHINKING "SENIOR SERVICE." STRUCTURAL LAG AND OLDER ADULT VOLUNTEERISM

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There has been much discussion in the gerontological community of the impending challenges and burdens on society associated with population aging. This focus neglects the tremendous potential of the largest, healthiest and most highly educated group of retirees in American history. The purpose of the present study was to determine whether there is a structural lag (Riley, Kahn, & Foner, 1994) in older adult volunteerism evidenced by the inadequacy of social institutions to mobilize the civic potential of the changing 55+ population. Data from focus groups, individual interviews, and surveys in Northern California's San Mateo and Santa Clara counties were used to examine the demographics, skills, and interests of older adults as well as the needs and interests of organizations that might utilize this human resource. Characteristics of roles and programmatic features most likely to attract potential volunteers emerged from the analysis. Concurrently, significant structural barriers to involvement were identified. Promising models of national and community service among current and upcoming retirees are examined. These models may expand definitions of work and leisure and foster the development of new institutions and opportunities for older adults to make meaningful contributions to society.

THE EFFECTS OF CO-RESIDENCE AND ELDER PARENTS' HEALTH ON ADULT DAUGHTERS' RESERVATION WAGES AND LABOR SUPPLY

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During last decades, there have been two important trends related to prime-aged women's labor market involvement: 1) a rapid change of the labor market from men-dominated to equally-distributed between men and women and 2) a steady increase in the elder population. The first implies that stronger labor market involvement have equipped today's women with higher human capital. Faced with greater potential employment and labor income, women are more likely to participate in the labor market. However, the second implies that women become increasingly responsible for eldercare in addition to childcare. They are "sandwiched in the middle."

Previous studies on elder living arrangements have focused only on their decision-making process. In this study, we investigate the effects of co-residence and elder parents' health conditions on adult daughters' labor supply to answer the questions: (i) what is the reservation wage for women who are not working in the labor market?; (ii) are reservation wages similar between those who co-reside and those who do not?; and (iii) do elder parents provide household production or "use up" household production?

We set up an *ad hoc* economic model of co-residence with intrafamily resource transfers and empirical models of co-residence: a probit model of labor force participation and Tobit models of the work-hours and wage. Estimates from the 1995 German Socio-Economic Panel and the 1993 Panel Study of Income Dynamics show that accounting for co-residence and elder parents' characteristics produces a significant difference in the labor force participation: (1) co-residence has a positive short-term effect while it has a negative long-term effect; (2) health status of elder parents has a insignificant negative short-term effect. Estimates of the Tobit models using the standard Heckman model reveal that co-residence increases work-hours while elder parents in poor health decrease them. The net effect is positive for female elders while negative for male elders. The reservation wages are higher in households where co-residence occurs.

We conclude that the model of household production is upheld for the price of the time at home, intrafamily resource transfers go both ways with co-residence, and female elder parents are more likely to add more production to household than male elder parents. Co-residence, contrary to some other findings, increases both labor force participation and working hours.

PREDICTORS OF VOLUNTEER STATUS AMONG OLDER INMIGRANTS.

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The present study was based on Okun's (1993) research predicting older adults' volunteer status in Sun City, Arizona. The purpose of this study was to identify predictors of volunteer status for older inmigrants of North Carolina. The sample consisted of 308 adults who migrated to areas in North Carolina after age 60. Most were married, retired, reported moderately high health ratings, and relocated on the basis of amenities.

Six categories of predictors, as investigated by Okun, were included in the logistic regression model: social structural, role, environmental, resource, lifestyle, and individual difference variables. The overall model was significant ($\chi^2 = 10.74$, df = 2, $p < .01$). Three of the six categories of predictors significantly contributed to the probability of distinguishing volunteers from non volunteers: volunteers were more likely to have volunteered at age 50, to attend church, and to have higher life satisfaction than non volunteers. These findings supported those of Okun. However, fewer variables separated the inmigrants into volunteer or non volunteer groups. Implications are discussed.

AARP Andrus Foundation Supported.

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WANDERING BEHAVIOR IN THE NURSING HOME SETTING

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Wandering, a common behavior exhibited by the confused elderly (Mayer and Darby, 1991; Monsour and Robb, 1982), poses a significant problem to the individual, to the family, and to care providers. The research supporting the effectiveness of various interventions in managing wandering behavior indicates that simple procedures and environmental modifications may be used to good effect. It is unclear, however, which interventions are being utilized in the nursing home setting (Fisher, Fink, and Loomis, 1993), and which interventions are the most economically practical.

The nursing director of each skilled nursing facility in the Commonwealth of Massachusetts (N=584) was asked in writing to complete a survey regarding the problem of wandering in his/her facility. The total number of surveys returned was 197 or 37.81%. The prevalence of wandering behavior in the nursing home setting was found to be 11.6% on traditional units and 52.71% on Alzheimer's units. Important information was gained on the use and effectiveness of various strategies in the management of wandering behavior. Moreover, it was determined that certain interventions were not used because the facilities were unaware of them or lacked the money and staff to implement them. Regression analyses determined that the percent of wanderers and the use of psychoactive medication were significant predictors of the degree to which wandering is viewed as a problem. Finally, Alzheimer's units were found to offer a unique and valuable setting for the care of wanderers. Explanations for these results as well as the limitations of the study are discussed.

MENTAL HEALTH SERVICES IN NURSING HOMES

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Epidemiological research suggests that nursing home residents are at a high risk for psychological disorders. Other research indicates that they frequently may remain undiagnosed, or mis-diagnosed. Limited research on interventions in nursing homes shows that this population may benefit from mental health interventions, but to date very little is known about the specific needs for mental health services in long-term care. We surveyed administrators of Kentucky nursing homes to assess their current mental health service utilization, perceived needs for services, and anticipated use were services available. 100 administrators responded, a 25% response rate. Very few facilities had staff with mental health credentials, e.g., psychologists (1%), psychiatrists (4%), or social workers (25%). A larger number employed religious or "other" counselors. About half used consultant psychiatrists (45%) or psychologists (18%). Administrators identified strongest needs for staff training in basic mental health and behavior management. Of mental health services used, administrators were most satisfied with psychiatrists and psychologists. The strongest barrier to use was the services not coming to facility. Results indicate a strong need to increase mental health services provided in long-term care.

ASSESSMENT AND TREATMENT OF DISCOMFORT FOR PEOPLE WITH END-STAGE DEMENTIA

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People with dementia have often been excluded from pain studies. There is evidence, however, supporting that people with dementia experience frequent pain, that the pain is often poorly assessed and undertreated, and that the etiology for pain descriptions is poorly documented (Ferrell, Ferrell, & Rivera, 1995). The use of the Assessment of Discomfort for Dementia (ADD) Protocol was studied with a convenience sample of 104 residents of long-term care with end-stage dementia. Use of the ADD Protocol was associated with a significant decrease in discomfort ($t = 6.56$, $p = 0.000$). The most frequently seen behavioral symptoms associated with discomfort were tense, body language, sad facial expression, fidgeting, perseverant verbalizations, and verbal outbursts. Use of the ADD Protocol was also associated with a significant increase in the use of scheduled analgesics and non-pharmacological comfort interventions. Use of the protocol was not associated with an increase in the use of prn analgesics or with prn or scheduled psychotropics.

COMBINING SELF-CARE TECHNOLOGIES WITH PERSONAL LONG-TERM CARE: EVIDENCE FROM THE 1994-95 NHIS DISABILITY SUPPLEMENT

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There are over 7 million disabled older persons in the U.S. How this population of disabled persons is to be cared for with maximum independence, and at what cost, is one of the major health care issues facing the country.

This paper examines one of the most important but understudied sources of long-term care for this group: self-care through the use of assistive devices. The 1994-95 National Health Interview Survey Disability Supplement, Phase 2 (NHIS-D2) is used to examine how assistive technology is combined with formal and informal personal care to meet the functional needs of disabled individuals in the community. Also explored is the importance of technology in increasing the effectiveness of personal care.

Results show that only 29% of older persons with mobility limitations rely on personal care alone, while 71% use some kind of assistive technology. Of those who use technology, 44% rely solely on devices, 20% also receive help from family or friends, and 19% use some formal home care. Older individuals using assistive devices report less actual difficulty carrying out tasks than those using personal care (either alone or in combination with equipment), even after controlling for level of intrinsic difficulty. For example, even at the highest levels of severity, about 25% of those who use equipment alone report a complete elimination of difficulty with mobility problems, compared with 8% of those using both equipment and personal care, and 6% of those relying upon personal care alone.

A STUDY EXAMINING PATTERNS OF TELEPHONE USE AMONG NURSING HOME RESIDENTS.

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Isolation from life's mainstream is a major concern for persons who live in nursing homes. The purpose of this study was to examine patterns of telephone use among nursing home residents in order to provide baseline information for the design of a telephone based intervention study. The sample consisted of five mentally alert nursing home residents who had telephones at their bedside. All incoming and outgoing phone calls were recorded for a period of one week, and the content was transcribed and analyzed for themes and patterns of usage. Findings are reported in terms of time, purpose and person involved in each call, the ratio of incoming versus outgoing calls, and difficulties encountered in dialing. Only one resident had an equal number of incoming and outgoing calls; two had only incoming calls, and two had mostly outgoing calls. One resident left 12 messages for her family, but the family seldom returned her calls. We were surprised that all the conversations of one resident were in her native Greek language, though the resident never spoke Greek in the nursing home, suggesting that her calls provided a link with her culture. These findings have immediate applicability for improving social support and community presence for nursing home residents.

INDIVIDUAL FINANCING OF LONG-TERM CARE: ANALYSIS OF TWO ALTERNATIVE STRATEGIES.

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Population aging, coupled with a significant increase in health care costs, has been the impetus behind the development of alternative financing options for long-term care that shifts the financial responsibilities from the state to the individual. Two such options are reverse mortgages and long-term care insurance.

I conducted a secondary analysis using the AHEAD dataset to determine the "beneficiaries" of reverse mortgages and long-term care insurance. I found that widows with little education were the least likely to benefit from a reverse mortgage due to their low home equity. Fourteen percent of the sample possessed long-term care insurance, of which only 41 percent of the policies were adjusted for inflation. The respondents in this group were married whites with at least a high school education between 70 and 80 years of age. Again, widows with little education would not benefit from this alternative financing strategy. From the findings, it was concluded that alternative financing schemes for long-term care do not benefit the groups that are likely to need long-term care in the future and promoting such schemes would not result in large Medicaid cutbacks or increase the equality of nursing home entry.

GETTING BETTER OR GETTING HELP?: AN ANALYSIS OF UNMET NEED AMONG OLDER ADULTS.

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A growing concern among service providers, policy makers and aging researchers is the number of older adults with disabilities who do not receive help from others when experiencing disabilities. Determining the extent of unmet need among older adults requires joint consideration of changes in disability and changes in care arrangements. The purpose of this investigation was to describe patterns of change in disability and care arrangements that result in prolonged periods of unmet need among older adults. Using data collected from a stratified, random sample of community-dwelling older adults (65+) conducted over a 30-month period in north Florida (N=1200), we estimate the amount of time spent (1) with no disability, (2) with a disability and receiving help, and (3) with a disability and receiving no help. We then use transition matrices and multinomial logistic regression models to examine patterns and predictors of change among these states. Analyses are conducted separately for 10 disabilities (6 ADLs, 4 IADLs). Approximately 72 percent of time respondents spent with an IADL difficulty was accompanied by assistance while respondents received assistance with only 28 percent of time spent with an ADL difficulty. Respondents reporting difficulty with ADL tasks also had longer durations of unmet need than those reporting IADL difficulties. Gender, socioeconomic status, place of residence, and health status influenced recovery and acquisition of care among those experiencing unmet need. The findings of this analysis demonstrate the need to consider the dynamic interplay between disability and social support. We also argue for the merits of disaggregating types of disability. [Support provided by NIA grants AG11183 and AG09649 and AHCPR grant HS000086.]

ASSOCIATIONS OF HEALTH AND BEHAVIORAL FACTORS WITH AMBULATORY BLOOD PRESSURE AMONG ELDERS IN LONG-TERM CARE

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It has been well documented that blood pressure (BP) varies throughout the day. However, little is known about BP patterns of institutionalized elders or factors that contribute to variation in BP among these residents. This paper describes predictors of BP among elders of two care settings, health care (HC) and independent living (IL)

27 HC residents (age = 87±8) and 29 IL residents (age = 80±6) wore ambulatory blood pressure monitors for 24 hours. Multiple regression models of BP variation among HC and IL over 6 time periods (24-hour mean, morning, early and late afternoon, evening, night) were developed.

Predictive models of blood pressure during all time periods differed between groups and HC models were stronger. Number of medications and health diagnoses were consistent predictors of BP among HC ($p<0.05$) yet rarely predictive among IL. For IL, perceptions and concern about health were better predictors of BP ($p<0.05$). IL residents who frequently felt stressed had higher BP ($p <0.05$). HC residents with mood/behavior problems had higher BP ($p<0.05$). Functional deficits had no impact on BP among IL and negative association with BP among HC. Both health and social well-being are important predictors of BP in institutionalized elders.

INFLUENCE OF THERAPEUTIC ACTIVITIES ON RESIDENT'S VERBAL INTERACTIONS AND ACTIVE ENGAGEMENT

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Findings from a study funded by the Retirement Research Foundation investigating the effects of therapeutic activities in the nursing home (NH) will be presented. Fifty-nine residents from four NHs were randomized into two conditions: experimental and usual activity control. Following Baseline observations, residents in the experimental condition were observed in two group activities, Enhanced Reading (ER) and Question Asking Reading (QAR). Residents from the usual activity control condition continued to participate in the ongoing NH activities. Computer-assisted observations of resident behaviors indicated a significant increase in verbalizations during the ER and QAR group activities. Repeated measure ANOVAs yielded a significant phase effect, $F(2, 114) = 16.57$, $p < .0001$, with residents of both conditions demonstrating increased verbal expressive behavior after baseline. Experimental residents also demonstrated significantly higher levels of engagement with environmental stimuli during ER and QAR activities. The repeated measure ANOVA yielded a significant phase effect, $F(2, 114) = 31.76$, $p < .0001$, and a significant phase by condition interaction, $F(2,114) = 38.11$, $p < .0001$, for this variable. The effects of ER and QAR activities generalized to periods outside of the group activities with experimental residents demonstrating significantly higher levels of engagement with environmental stimuli (e.g., mail, dolls) and stimulus materials directly related to the therapeutic activities (e.g., pictures and readings related to activity program) when observed between 1pm and 3:30 pm ($F(1, 114) = 4.32$, $p < .0422$; $F(2, 114) = 11.08$, $p < .0015$. The influence of activity programing on the behavior of NH residents will be discussed.

PSYCHIATRIC SYMPTOMS AS PREDICTORS OF NURSING HOME PLACEMENT AMONG ELDERLY PUBLIC HOUSING RESIDENTS

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The needs of elderly public housing residents for supportive services increase as they age in place, putting them at risk of nursing home placement. Data from a prospective study were used to determine predictors of nursing home placement among residents (n=945) of 6 urban public housing developments for the elderly. At baseline, a two-staged epidemiologic survey was used to determine the prevalence of psychiatric disorders and assess physical health and functional status. Over 28 months, 6.3% of the total sample moved to nursing homes. Logistic regression analysis of weighted data from Stage II subjects (weighted n=881) was used to identify correlates of nursing home placement. Significant baseline predictors of nursing home placement were cognitive disorder (OR=13.6), scores of 5 or more on the General Health Questionnaire (OR=7.6), 1 or more ADL impairments (OR=5.0) and higher scores on the Brief Psychiatric Rating Scale (BPRS) (OR=1.1). A regression model that included the 16 BPRS items (in place of the BPRS total score) showed that nursing home placement was significantly associated with higher ratings on hostility (OR=1.9), mannerisms/posturing (OR=1.6), and suspiciousness (OR=1.5) and lower ratings on unusual thought content (OR=0.30). These findings demonstrate that elderly public housing residents with symptoms of serious mental illness are at greatest risk of nursing home placement.

THE FLORIDA CARE "COLLEGE": TRAINING NURSING HOME AND ASSISTED LIVING FACILITY STAFF ABOUT MEMORY DISORDERS AND BEHAVIOR MANAGEMENT.

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A curriculum was designed to improve skills of direct care staff from nursing homes (NHs) and assisted living facilities (ALFs) who work with residents having memory disorders. Topics included: reshaping staff attitudes, categories of memory disorders, identifying causes of problem behaviors, behavior modification, activities, the physical environment, communication, and stress. Three training methods were compared: 1) Classes held at the university; 2) Train-the-trainers classes at the university for NH and ALF supervisors; 3) Classes, offsite, for the majority of staff from one NH and from one ALF. Method 1 attracted the most staff, but few from any one facility. Method 2 attracted few trainers, who at 3 month followup, failed to conduct training. In Method 3, we successfully recruited a majority from an NH, but did not from an ALF. All groups improved knowledge at post-tests (& maintained at follow-up). Administrators rated attendees' work-performance as improved. Implications for future training are discussed. (Supported by Retirement Research Foundation grant #95-121)

INTERPERSONAL RELATIONSHIPS AND RESPONSES TO DEATH, RELOCATION, AND NEW ADMISSIONS AMONG RESIDENTS OF HOUSEHOLD UNITS IN A LONG TERM CARE FACILITY

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Because resident-centered design utilizing small household units offers the potential for the development and maintenance of interpersonal relationships, the question arises about the nature of these relationships and the effects of death, relocation, or admission of persons to these small households. Behavior mapping in 4 household units each housing 9 persons was conducted two days a week in order to determine the nature, frequency, duration, and intensity of residents' interpersonal interactions over a 4 month period. Both nonverbal and verbal interactions were noted. The observer was called to the unit within 24 hours of a death, relocation or new admission to conduct additional observations. Residents varied widely in their interpersonal interactions, with less severely affected persons often making gestures of interpersonal approach to persons more severely affected (and often nonverbal). Such gestures included talking, patting, kissing/hugging, and stereotyped greetings. Observations of agitation and searching-type behavior were made following a death, possibly due to anxiety over the change or grief over the loss. Suggestions are made for chaplaincy services to develop simple rituals to enable residents of these households to manage the emotions of anxiety and grief.

THE LANGUAGE OF CARING: NURTURING ATTACHMENT BETWEEN FORMAL CAREGIVERS AND CARE RECIPIENTS.

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We interviewed 30 nurses' aides working in nursing homes in Evanston, IL regarding race relations in the facilities. Those results have been previously reported. The interviews also yielded rich data about the language of caring. Nurses aides used language relating to family, attachment, and bonding to describe their relationships with residents. The aides developed a nomenclature of identification with residents, denoting their fictive parent care and parenting of residents. This seemed to help aides generate and maintain caring attitudes toward residents, in spite of ethnic differences and occasional racial abuse of aides by residents. The data support the theoretical literature on caring, with respect to the connection between emotional attachment and caring actions. Implications for quality of care in nursing homes will be discussed.

PAIN IN THE NURSING HOME: CURRENT ASSESSMENT AND MANAGEMENT PRACTICES

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Pain can prevent optimal function and compromise quality of life for many older adults. Little is known about current pain management practices in nursing homes. The purpose of this study was to identify and assess the effectiveness of the current pain management practices among nursing home staff.

This year-long observational study was conducted in a 255-bed university affiliated long term care facility. Using standardized measures, 46 participants of a restorative rehabilitation program (12 men, 34 women; mean age 78.4± 11 years) were interviewed monthly to determine location and severity of painful symptoms. Resident records were reviewed for documentation of pain in nursing progress notes and in the minimum data set (MDS). Pain management data were abstracted from care plan and medication administration records.

Results:

Residents with pain on evaluation	Management	
	Care plan addresses pain N (%)	Resident received meds for pain N (%)
Interview (20)	3/20 (15%)	14/20 (70%)
Nursing notes (33)	7/33 (21%)	32/33 (97%)
MDS-section J(22)	5/6 (23%)	17/22 (77%)

Conclusions: These findings indicate that more than 70% of the restorative participants reported painful symptoms and 97% received medications for pain in 32/33 cases when pain was reported in the nursing notes. The MDS provided some indication of pain in 22/46 cases, but care plans addressed pain concerns in only 15-23% cases. While most residents who reported pain received medication, the MDS and nursing care plans did not reflect the amount or severity of pain experienced by residents.

COMMUNICATING WITH THE ALZHEIMER'S RESIDENT:PERCEPTIONS OF CARE PROVIDERS IN A RESIDENTIAL FACILITY

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Optimal quality of care for long term residents, especially those suffering from Alzheimer's disease (AD), has been linked to meaningful and rewarding communication with staff caregivers. However, the precise methods of effective, supportive communication used by care providers of persons with AD have not been identified. The purpose of this study was to investigate caregivers' perceptions of communication used in dementia-specific community residential facilities. Eight care providers were interviewed and asked a series of in-depth, semi-structured questions regarding their communication experiences with AD residents. Employing features of grounded theory methodology, all interviews were audio recorded and transcribed verbatim. The transcripts were coded using an open-coding technique followed by selective coding processes. Results merged into two core categories: 1) Compliance Gaining Strategies and 2) Learning the Language. Results indicate that care providers use a myriad of strategies to improve the quality of life of AD residents. Discussion points will focus on future research and communication training for staff caregivers.

SYSTEM INPROVEMENTS IN NURSING HOMES: A MODEL FOR IMPROVING FRONT LINE CAREGIVERS' DELIVERY OF CARE TO RESIDENTS WHO ARE BOTH COGNITIVELY AND PHYSICALLY INTACT

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The wholly compensatory system of care presently utilized in nursing homes, encourages front line caregivers to anticipate dependence in residents, "do excessively" for them, and discourage them from "doing" for themselves. The result is that residents who continue to be cognitively and physically intact after admission to a nursing home, soon become dependent on caregivers to performed activities of daily living (ADLs) and instrumental activities of daily living (IADLs) which they performed independently in the community. Consequently, these residents experience decreased sense of control, autonomy, and self-esteem, and become anxious and depressed. To break this cycle, the author proposes an alternative model, an educative supportive system of care. Here, the emphasis is on recognizing clients' strengths and need for self-reliance, and encouraging and rewarding them for performing to the best of their ability. Front line caregivers, supervisors, and administrators collaborate to establish and maintaining the "therapeutic milieu". Caregivers foster and reinforce residents' independent behaviors, and supervisors and administrators foster and reinforce caregivers' independence-promoting behaviors. In a 24-week repeated measures designed study, the effects of caregiving guided by the proposed model (Condition 1) was compared with caregiving guided by the present model (Condition 2). A sample of 24 residents were randomly assigned to either Condition 1 or 2. Residents were measured on self-care behaviors and self-esteem. The result was that residents in Condition 1 did significantly more self-care behaviors (F = 20.44, *df* = 1/18, p = .000) and had higher self-esteem (F = 12.04, *df* =1/18, p = .003) than those in Condition 2.

RACIAL DIFFERENCES IN STAGES OF LONG-TERM CARE SERVICES UTILIZATION: A LONGITUDINAL PERSPECTIVE

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Prior research on racial differences in use of formal and informal long-term care services has taken two approaches: 1) the relationships of informal-formal care among racial groups, 2) the effects of socioeconomic and health status on use of formal and informal care services across racial groups. The findings are contradictory. This study assumes a hierarchical order of care preference by elderly with ADL/IADL difficulties, that is informal care is the first choice followed by formal care and hypothesizes that 1) the relationship of informal care and formal care is supplementary, and 2) the rate of moving from informal care to formal care is slower for elderly African Americans than for elderly whites. A three category ordinal outcome is constructed: 0) no helper, 1) use informal helper only, 2) formal/mixed helpers. A random effect regression model for ordinal outcomes with non-proportional odds for explanatory variables (varying in threshold) is applied. Findings support our hypothesis that the relationship of informal and formal care systems are supplementary: more use of informal care leads to more use of formal care. In regard to utilization patterns among racial groups, we found that while African Americans and whites are similar when they cross the first threshold (from no helpers to informal helpers), the second threshold (from informal helpers to formal/mixed helpers) is higher for African Americans than for whites which indicates that movement from use of informal helpers to formal/mixed helpers is more difficult for African Americans.

THE NURSING HOME RESIDENT SATISFACTION SCALE: A PSYCHOMETRIC EVALUATION

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Few efforts have been made to measure patient satisfaction among the institutionalized elderly and several criticisms have plagued the research done to date (e.g., inadequate operational definitions, instruments of questionable reliability and validity). In an effort to address these concerns, Zinn, Lavizzo-Mourey, and Taylor (1993) developed and evaluated an instrument for use with nursing home residents. The Nursing Home Resident Satisfaction Scale (NHRSS) contains items to measure satisfaction with nursing home care. While promising results emerged from a pilot study, a number of limitations were noted. The purpose of this study was to examine three fundamental properties of the NHRSS: item reliability, temporal stability, and concurrent validity. Using five nursing home facilities in Memphis, TN, 61 resident-surrogate-staff triads completed the NHRSS. Four weeks after the initial interview, each participant was contacted a for reassessment. Factors examined were the generalizability of the estimates of reliability to a more diverse group of nursing home residents, the convergence of resident scores with collateral staff and family member ratings, and the stability of resident satisfaction scores and their relationships with the collateral measures across a relevant time interval. Results indicate that the NHRSS is an internally consistent instrument that can assess satisfaction reliably over time for nursing home residents. The ability of staff and family members to accurately represent the residents' satisfaction is mixed. While the NHRSS is useful for nursing home residents, caution must be exercised before relying on the responses of staff and family members in lieu of those of the residents.

EFFECTS OF A THERAPY DOG IN ALLEVIATING THE AGITATION BEHAVIORS OF SUNDOWN SYNDROME.

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Agitated behaviors that occur in persons with Alzheimer's disease (AD) pose a particular challenge to nursing home staff during the early evening hours (sundown period). The purpose of this study was to examine the effect of a therapy dog on agitation and socialization in persons with AD who display behaviors consistent with sundown syndrome. A repeated measures, within subjects experimental design was used. Residents ($N = 28$), were videotaped in common areas of special care units in two sessions with and without a dog present. Videotapes were scored using the Agitation Behavior Mapping Instrument (Cohen-Mansfield, 1986) and Daubenmire Data Coding Protocol (Daubenmire et al., 1977). There was a statistically significant decrease in agitation when the dog was present ($F = 4.17$; $p = .0511$). Socialization behaviors were analyzed for frequency and duration. Leans toward (frequency, $t = 2.08$, $p = .0467$), smiles (frequency, $t = 2.58$, $p = .0156$; duration, $t = 2.19$, $p = .0374$), tactile contact (frequency, $t = 2.35$, $p = .0262$), looks toward (frequency, $t = 5.06$, $p = .0001$; duration, $t = 6.97$, $p = .0001$), and verbalization (frequency, $t = 2.96$, $p = .0063$; duration, $t = 2.13$, $p = .0421$) were statistically significantly increased when the dog was present. Based on the findings, it could be recommended that a therapy dog be used as an adjunct to other calming interventions for persons with AD during sundown syndrome.

DEPRESSION IN NURSING HOMES.

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Despite the fact that nursing homes have served as the most productive laboratory for the study of mental health problems of late life, psychological data on depression and its interaction with other problems or disorders are not well known. This study examined data from 300 referrals for psychological evaluations from eight nursing homes. Referrals involved dementia or delirium (70%), depression or anxiety (25%), or other issues (5%). Participants averaged 76.7 years, were primarily widowed (54%), female (78%), Caucasian (58%), had resided an average of 2.4 years in a nursing home, and had multiple medical disorders ($M = 4.1$). Residents were given a battery of brief cognitive scales, depression measures, anxiety measures, and behavior ratings.

Three issues were studied. First, basic normative data on depression accounting for age, education, and previous psychiatric care, were presented. As expected, cut-off scores for maximal classification ratios are different form other populations. Second, correlations of depression scales with other scales revealed common features with other forms of psychopathology, especially anxiety. A factor analysis also showed three depression factors, a general depression factor along with a cognitive factor and somatic one. In addition, the relationship of the factors with other measures, including cognition, were significant. Third, depression was assessed according to level of cognitive status. Again, frequency and type of depression change as a function of cognitive status. Discussion highlighted that depression of nursing home residents is different from that of other older populations.

FACTORS AFFECTING WOMEN'S LONG-TERM CARE PREFERENCES.

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It is assumed that elderly people, regardless of how much assistance they require, prefer to remain at home receiving community care rather than relocating to an institution. To explore this assumption, 434 community residing women (18-92) were given descriptions of institutional and community care and asked which they would choose for an 84 year-old woman described in terms of different levels of functional impairment, cognitive impairment, and informal support (living with spouse, living alone, living alone with children). Respondents were also asked their choice for themselves in the same circumstances. Although overall, for other and self, there was a preference for community care, preference was strongly affected by specific circumstances. As the described woman's level of impairment increased, the proportion choosing institutional care increased. However, informal support played a pivotal role. When the woman lived with her spouse, community care was the overwhelming choice regardless of level of impairment; when the woman lived alone, institutional care was favored even if she was not impaired. When the woman lived alone with children nearby, community care was the choice when level of impairment was low and institutional care when impairment was high. In a follow-up study, 130 community care nurses completed the same task and were also asked their choice if they were the caregiver for the woman described. Results were similar to those for the general sample of women. The findings showed that in certain well-defined circumstances, institutional care is preferred. Policy implications are discussed.

PERSONAL ASSISTANCE SERVICES: CLIENT DIRECTION VERSUS PROFESSIONAL AGENCIES

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This HHS/ASPE-funded study examined the outcomes for elderly clients of two different models for organizing and delivering personal assistance services to low-income, clients with disabilities served in California's In-Home Supported Services Program. A statewide survey was completed in 1996-1997 with a random sample of 567 elderly clients. Half the client sample received traditionally-organized services from professional home care agencies; the other half, in the client-directed model (CDM), recruited, hired, trained and supervised their own unaffiliated workers. The study examined client outcomes in several areas: service experience; safety; empowerment; unmet needs; service satisfaction; and quality of life. Across outcome areas, elderly CDM clients report either no differences when compared with agency clients or report more positive outcomes than their agency counterparts. Interpretation of the findings is complex. There is evidence that for some clients, agency-directed services are appropriate or essential, although client-directed services are more broadly embraced by older adults than previously believed. Strengths and weaknesses of both models are considered, as well as implications for state and federal policy.

RESTRAINT USE ASSESSMENT: USEFUL DATA OR DEFINITIONAL ARTIFACT?

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Empirical studies of restraint use and restraint reduction programs frequently use different definitions of restraints, rendering across site comparisons problematic. Some facilities may look relatively restraint free where this may be solely an artifact of a limited definition of nonchemical restraint. We examined the relationship of different definitions of nonchemical restraint use on assessed frequency of restraint use. Chart reviews were conducted for all residents of one general medical longterm care facility and one psychiatric longterm care facility during 1995. Preliminary analyses indicated that 55% of patients at the psychiatric facility used nonchemical restraints at some time during the year compared to 84% of general medical facility patients. 18% of nonchemical restraint use was for siderail use for the psychiatric facility compared to 80% for the general medical facility. Further comparisons demonstrating definitional differences in restraint use figures will be presented.

CHARACTERISTICS OF NIGHTTIME NOISE IN NURSING HOMES.

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Nighttime noise is one factor that contributes to sleep disturbance in nursing home (NH) populations. However, little is known about the nighttime noise environment of nursing homes, information that is important in developing effective interventions. Preliminary research using state-of-the-art sound level meters was conducted in two NHs to characterize common nighttime noise sources and evaluate the effect of simple environmental and environmental use noise mitigation strategies. Background nighttime noise level in resident rooms (e.g., from air conditioner) was between 42 and 45 A-weighted decibels (dBA). Although "quiet" by subjective evaluations, observed background noise levels exceeded recommended maximum noise levels in bedrooms in residential and health care settings (25-35 dBA). (A 5 dBA difference is clearly noticeable when evaluated subjectively.) Pulling bed curtains produced noise levels of 65-75 dBA. Curtains with metal vs. plastic curtain rings and rods were about 10 dBA louder. Elevator operation increased hallway noise levels to 57-69 dBA. Shutting room doors lowered overall noise levels at bedside during elevator operation; the most noticeable effect was on dampening peak noise levels. The study also yielded evidence that a noise source's location and the NH's architectural layout can have a dramatic effect on the movement of noise and differences in noise levels at locations equidistant from a sound source. Routine activities can create loud nighttime noises in nursing homes. Simple environmental and environmental use interventions may be helpful as noise mitigation strategies.

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RELIGIOSITY AND THE STRESS PROCESS

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Informal caregivers often face stressful circumstances that can lead to difficulties in areas of life outside of caregiving. Their experiences provide a poignant example of why stress and its deleterious effects must be understood as an ongoing process, shaped by many factors. Within a stress process framework we examine the ways in which religiosity may serve to ameliorate the array of stressors that typically surround enactment of the caregiving role. Data come from 200 people engaged in caregiving for a spouse suffering Alzheimer's Disease or a similar dementia. We attempt to assess the significance of religiosity, measuring one's religious identifications, as well the form and substance of his or her religious expressions, to each juncture of the stress process: (1) the exposure to stressful conditions associated with caregiving; (2) the proliferation of stress to other areas of life; and (3) compromised health, in this case, depression. We find that this sample of caregivers, which has a mean age of 73 years, is highly religious, although women and racial/ethnic minority caregivers are even more so. Religiosity is associated with the intensity of care-related stressors, e.g., those experiencing role overload or role entrapment are more apt to pray for an end to the caregiving experience. There appears to be no direct association between religiosity and depression.

EFFECTS OF RELIGIOUS AFFILIATION AND INVOLVEMENT ON VALUATION OF LIFE.

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Relationships between the classic components of religion (structural, behavioral and subjective) and selected Quality of Life indicators were examined in a sample of 454 community dwelling elders age 70+. Measures included religious affiliation (Protestant [52%], Jewish [18%], Catholic [19%]), religious behavior (frequency pray, to religious service), spirituality (importance of religious beliefs day to day; my life is guided by strong religious beliefs), activity participation, quality of time use, positive affect, depression and an index of Valuation of Life (VOL). A series of regressions arranged to produce a path analysis found that religious affiliation did not directly effect time quality, mental health or VOL. Affiliation did lead to the intervening variables of religious behavior and spirituality. Being Protestant was associated with more frequent religious behavior and greater spirituality, while being Jewish was associated with less religious behavior and spirituality, but more frequent non-religious activities. The intervening religion variables were directly associated with some of the quality of life measures: more frequent religious behavior and higher VOL, while stronger spirituality led to greater time use quality and higher VOL. The behavioral and subjective components of religion seemed in general to be associated with the enrichment of quality of life, but as in depression, may also represent a means of coping with psychological problems.

Supported by NIA RO1 AG11995.

The Impact of Serious Illness on Religiosity in Late Life

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There has been a growing endorsement of the positive value of religious beliefs and attitudes on coping with illness in later life. However there is far less evidence regarding the impact of major or life threatening illness on religious attitudes. In this study, we explored the impact of major or life threatening illness on self-conceptions of religiosity among the old-old.

We examined nine potentially life threatening diseases (e.g. Cancer, liver and kidney disease, lung and heart aliments) and their individual and collective impacts on self conceptions of religiosity. We found no significant effects of major or life threatening illness on degree of religiosity. However, those without major or life threatening illness were twice as likely to endorse low levels of religiosity, compared to those with major illness, lending some support to the notion that there are "no atheists in fox holes". Liver and heart disease were specific conditions significantly correlated with greater endorsement of religiosity. These findings call attention to situational influences on late life religiosity.

RELIGIOUS ACTIVITY, SOCIAL SUPPORT, AND POSITIVE AND NEGATIVE AFFECT OVER 12 MONTHS IN AN OLDER ADULT SAMPLE.

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In this study we examine four models of stress buffering involving religious involvement and social support – prevention, distress-deterrent, moderator, and suppressor models. 262 older adults were randomly selected from the Worcester MA annual city census (68% response rate) and interviewed twice over 12 months. A second "snowball" sample of 80 African American older adults (88% response rate) was also developed. Both samples were interviewed using multiple measures of life stress, social support, religious activity, and positive and negative affect. Comparisons among the four models at time 1 using SEM demonstrated social support effects on negative affect that are in keeping with a suppressor model, and religious activity effects on positive affect that are in keeping with the moderator or distress-deterrent models. Stress is associated with diminished social support, and social support is in turn associated with less negative affect. By contrast, religious activity is associated with higher levels of positive affect in general, but particularly so among individuals experiencing less rather than more stress.

ASSOCIATIONS AMONG SPIRITUAL TRANSCENDENCE, RELIGIOUSNESS, AGE, AND DISCRETE EMOTIONS

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Theorists assert the need for conceptual distinction between spirituality and religiousness in later life, yet few studies have empirically demonstrated its importance. Rochester area residents were surveyed ($N = 50$; $\underline{M}$ age = 52 years) to examine associations among age; sex; organized, nonorganized, and subjective religiousness; spiritual transcendence (ST); and the frequencies of five emotions (sadness, fear, anger, guilt, and positive affect). The three aspects of religiousness were measured with separate factor scores, each score combining responses to three items. ST was assessed with a six-item scale that showed high consistency (alpha = .96) and construct validity. Emotions were measured with PANAS-X subscales. ST was correlated with organized, nonorganized, and subjective religiousness. Age, but not sex, was positively associated with all three aspects of religiousness and with ST. With one exception, the three religiousness variables were nonsignificantly correlated with the emotions, but ST was inversely associated with all four negative emotions ($\underline{p}$s < .05). In a repeated measures ANOVA predicting the five emotions with age, sex, the three religious variables, and ST, female sex ($\underline{p} < .08$) and ST ($\underline{p} < .06$) were marginally significant predictors of lower frequencies of the emotions. A univariate ANOVA with the same set of predictors revealed an independent association of ST with lower anger ($\underline{p} < .01$). Thus, ST and religiousness differ in their emotional correlates. The construct of ST and its theoretical relationships with religiousness, emotions, and aging are discussed.

Acknowledgements. Partially supported by NIH grants K08-MH01408 (Dr. Seidlitz) and K07MH01135 (Dr. Duberstein).

RELIGIOSITY AND SOCIAL SUPPORT EFFECTS ON WELL-BEING OF MULTI-ETHNIC OLDER PEOPLE

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Research was directed at determining the differential effects of social support & religious participation on the well-being of three ethnic groups of older adults (African American, Caucasian, Latino) in San Diego County (N=2100). Literature on the social epidemiology of religion suggests that religious participation is associated with decreased morbidity, reduced mortality & increased well-being. Using multiple regression analysis, demographic/socioeconomic, social support, and religious participation variables were regressed on well-being. Results indicated that among **Caucasians**, social support accounts for 5.7% of the total variance in well-being while religious participation accounted for a non-significant increase of only .1% (model r2=.088). Among **African Americans**, social support and religious participation explained 5.4% (3.3% and 2.1% respectively) of the variance in well-being (model r2 = .126). Among **Latinos**, social support and religious participation explained 3.1% (1.8% and 1.3% respectively) of the variance (model r2 =.055). Although religious participation plays a smaller role than social support on the well-being of older people, its relationship to improving well-being in tandem with social support is significantly more important in older Latinos and African Americans. This suggests stress meliorating effects of religious participation on the well-being of older people in minority communities. Results suggest further investigation is warranted for determining the health promoting effects of religious participation on at risk older people.

The Effects of Spirituality on Older People in Rural Environments

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Spirituality has been shown to offer support throughout the life cycle. Older people with self-described spirituality have been shown to demonstrate increased resourcefulness when confronted with life problems such as loss. The purpose of the study was to determine if older people, who assessed spirituality as an individual strength, experienced less mental health challenges. The subjects resided in the rural south and Appalachia. Data was collected from strengths assessments administered to people residing in long term care and the community. The assessment included seven life domains and captured both individual wants and needs. Reminiscent therapy was used to validate assessment findings. The study suggests that spirituality increases optimism, natural support systems, and a sense of membership. Further, it would appear that individuals who consider themselves "spiritual" were less likely to experience mental health challenges such as depression. The paper concludes with practice principles that build upon the strengths of spirituality.

SUBJECTIVE PHYSICAL HEALTH AND NONORGANIZATIONAL RELIGIOUS INVOLVEMENT AMONG ELDERLY BLACK AMERICAN WOMEN AND MEN: TESTING WHEATON'S STRESS-BUFFERING HYPOTHESIS MODELS

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Using the construct of nonorganizational religiosity (Levin, Taylor and Chatters, 1995), this paper tested the stress-buffering models identified by Wheaton (1985) to assess whether nonorganizational religious activity buffers the effect of stress on the subjective health status of elderly African Americans. Analyses were based on data from the 1992 National Panel Survey of Black Americans Wave IV. It was hypothesized that there would be significant differences in the role of informal religious activity as a coping resource across genders. Specifically, it was predicted that older women have greater nonorganizational religious involvement than older men and that elderly men and women engage in informal religious activities in different ways to combat the deleterious effects of stress on their health. The results indicate that informal religious activity suppresses the effects of stress on the subjective health of elderly women. The stress-buffering model for men, however, appeared somewhat different. For elderly African American men, the results indicate that increased exposure to stress does not increase informal religious activity. Nonorganizational religious activity, therefore, does not reduce the effects of stress on subjective physical health for African American male elders.

AGING AND RELIGIOUS CONSOLATION AMONG MEN AND WOMEN: SOCIAL AND SITUATIONAL ANTECEDENTS.

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While most religions provide a meaning system that helps people cope with personal problems, there has been relatively little research on how and why men and women seek spiritual consolation and comfort. This study examines the social, religious, and situational antecedents of spiritual consolation among adult men and women across the life course. Data from a national longitudinal survey, *Americans' Changing Lives, Waves I and II* (n=3,617), are used to examine whether physical and mental health problems precipitate religious consolation. Depression was associated with religious consolation among both men and women, but physical illness was more likely to heighten consolation among men only. Older men were also more likely to seek spiritual comfort when facing problems, but no age differences were observed among women. The findings indicate that religious consolation is most likely among those who identify with and practice a religion suggesting that religious consolation is intensified among religious persons rather than initiated among non-religious men and women.

(Supported by the National Institute on Aging.)

PHYSICIAN COMMUNICATION COUNTS: ADHERENCE AMONG OLDER FEMALE CHURCH MEMBERS

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1517 women church members from 45 churches in Los Angeles County were surveyed in 1996 to determine their baseline status on a variety of health behaviors. These women, ages 50-80, were 45% white, 32% black and 23% Hispanic. Race differences for many of the demographic and health characteristics were notable. For example, only 8% of the whites were poverty-level compared to 25% of the blacks and 46% of the Hispanics. Also, while 57% of the women overall were adherent with mammography maintenance (2 mammograms within 4 years), only 24% of Hispanics were adherent. Overall, 74% were adherent with clinical breast examination (CBE) use and 34% were current users of hormone replacement therapy (HRT). Mammography maintenance, CBE use and HRT use are the primary dependent measures of this analysis which is focused on women's use of key preventive measures for breast cancer and cardiac disease, the two prevalent causes of mortality for this older age group. Independent measures included race, insurance status, marital status, depression level, income, educational status, physician race and specialty, and physician's perceived level of enthusiasm for the procedures. Church-related measures did not make the final regression model. Results of the logistic regression were consistent across the three outcomes. Physician's enthusiasm, which was operationalized in a focus group as a combination of physician communication and caring, was the strongest predictor of reported adherence (OR=2.6 for mammography, 2.9 for CBE and 11.6 for HRT). Other significant predictors included some insurance, better health status, being younger, finishing high school, and not having an Asian or Hispanic physician. These findings are encouraging since physician communication skills, unlike other predictors such as insurance and race, can be taught and learned, thus increasing the possibility of improving adherence among minority and older women.

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"CROWDING OUT": AN ANTHROPOLOGICAL EXAMINATION OF AN ECONOMIC PARADIGM

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Due to rapid population aging worldwide, current systems for providing old age support are in jeopardy. Consequently, policymakers are now debating how to provide old age security cross culturally. Changing demographics, dependency ratios, modernization and urbanization are all impacting traditional familial support mechanisms. Growing attention is now focusing on whether nonfamilial forms of support should be encouraged and whether these resources need to be transferred directly to the elderly rather than to families. However, the efficacy of governmental provision of such aid has been questioned. Some policymakers contend that governmental support may decrease the cultural value placed on filial assistance and "crowd out" traditional patterns of family support. Yet few empirical studies have explored the results of providing governmental support (e.g., pensions) to rural Third World elderly. This paper discusses research that I conducted in Mongolia from 1995-97, a formerly socialist nation where a state pension system has been available to all elderly since the 1970's. Employing an anthropological approach, this research examined the "crowding out" phenomenon, generally studied by economists. Using both a survey and in-depth interviews, it provided a micro-level analysis of how receiving pensions affected intergenerational support for a sample of 104 rural elderly. The important finding that pensions did not "crowd out" family support in this context is discussed. Further, I illustrate why the value of survey research alone may be limited for understanding how pensions influence cultural patterns of intrafamilial exchanges. I conclude by summarizing how an anthropological approach complements survey data for studying the "crowding out" phenomenon.

SOCIAL SECURITY: DOES PRIVATIZATION MAKE MORE SENSE THAN THE ALTERNATIVES FOR DEVELOPING NATIONS?

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The question we address is whether or not the privatization of social security makes sense for developing nations and if so under what circumstances. We begin with a discussion with three major alternatives to the privatization of old-age security: informal family support, national provident funds, and social insurance based public pension schemes. We follow this with a discussion of two alternative models of privatization, the Chilean full privatization model and Argentine partial privatization model. We compare the two and discuss the pros and cons of each. Our major conclusions are: (1) The jury is still on the privatization schemes in Chile and Argentina. While Chilean model has some important limitations, overall it has performed well over the past 15 years, a very favorable period for financial markets. It is less clear what will happen during an extended period of economic stagnation. (2) For some if not many countries it would make more sense to reform existing public pension schemes than to replace them with privatized schemes, at least until we have a better idea of how privatized schemes perform under adverse financial environments. (3) Privatized schemes have important distributional effects that deserve more attention than they have been getting; female and low-wage workers typically stand to lose while well paid workers in the modern sector stand to gain. (4) The provident fund approach may be the best alternative for some countries, public pension schemes for some, and privatized schemes for others. A number of contextual factors must be taken into consideration when deciding which alternative is best for a specific country.

Centenarians in the U.S.: Findings from the *1990 Census of Population*. Victoria A.Velkoff, Constance A. Krach, U.S. Bureau of the Census, Washington, DC, 20233.

The majority of centenarians living in 1990 were part of the 1885 to 1890 birth cohort in which approximately 7 million babies were born. People of this cohort were in their late 20s during World War I, in their 40s during the Great Depression in the 1930s, and in their late 70s or early 80s when Neil Armstrong took the first step on the moon in 1969. Society has long been fascinated by those surviving through so many historical events, with much research focused on the biological and social factors associated with such exceptional longevity. However, numerous difficulties are encountered when determining how many people actually live to age 100 and above.

Using data from the *1990 Census of Population*, this study examines the number of centenarians enumerated in 1990, as well as projections for the future. Our evaluation of the 1990 count of 37,306 centenarians indicates that the number is excessive; alternative estimates based on age and race modified counts and the method of extinct generations produce a figure closer to 28,000. Special attention is given to data quality issues, including age misreporting, the lack of official birth records for many in this segment of the population, and alternative sources of data that can be used to calculate the number of centenarians.

Examination of state-level data reveals that ten states have more than 1000 centenarians, although only one of these, Massachusetts, is among the ten states with the highest percent of their population composed of people aged 100 and over. Centenarians are more likely to be women and tend to have lower education levels than those in younger cohorts. Women in this group are more likely to be widowed than are men (84% vs. 58%). Nearly 1 in 4 male centenarians are still married, compared to only 1 in 25 women. Looking to the future, it is projected that the number of centenarians will increase dramatically, and that there will be greater racial and ethnic diversity among those surviving to age 100 and above in the decades to come.

ELDERLY SPACES IN AGING SUBURBIA: A TRANSFORMATIONAL GEOGRAPHY OF POSTWAR SUBURBS

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Post-war America witnessed the expansion of its suburban communities as families left the central cities to find their "paradise in the woody glens of the suburbs." Today many of these woody glens are more similar to central cities due to continued urban expansion and dramatic urban social restructuring. As these suburbs have aged and changed, so to have many of the suburban residents. As a consequence, the post-war suburban communities have developed space dominated by older residents. This study focuses on the dynamics of the age transformation of this suburban space in terms of the relationship between aging residents and their changing social and physical environment. This research examines the evolution of elderly spaces, from 1950 to 1990, within the community of Arlington, Virginia, an older suburb of the Washington metropolitan area, by combining quantitative geographical analysis with field observations. While aging in place occurs in Arlington, the social dynamics of the community's recent growth has created a more complex pattern of elderly spaces than appeared a decade earlier. Specifically, the large influx of immigrant families into the community has reshaped the physical and social patterns of neighborhoods that were once expected to become homogenous elderly-dominated spaces into neighborhoods now enriched with ethnic and age diverse spaces.

SOCIOECONOMIC STATUS AND HEALTH AMONG OLDER ADULTS: THE IMPORTANCE OF INDIVIDUAL AND NEIGHBORHOOD SES INDICATORS AMONG DIFFERENT AGE GROUPS

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Although research has consistently shown a linear relationship between socioeconomic status (SES) and health, with better health at successively higher levels of the SES hierarchy, the precise mechanisms responsible for the effect, as well as the specific conditions under which it is most robust are less well understood. In addition to individual-level SES indicators (income, home ownership, education), this paper examines the perceived suitability and safety of the neighborhood of residence as predictors of physical disability (ADL/IADL difficulties) and perceived health in a sample of adults age 50 and over. Difficulty obtaining medical services and emotional well-being are explored as potential mediators of SES-health links. To determine whether the SES-health link differs across age groups, the paper examines these processes separately within 50-64; 65-74; and 75+ year olds. Data are presented from a statewide RDD telephone survey of Pennsylvania adults (n=1181). Results indicate that income is inversely related to physical disability, especially among 50-64 year olds, and is not present in 65-74 year olds. Both education and income are inversely related to perceived health, but only among 50-64 year olds. Among the older cohorts, only education predicts perceived health. In addition, perceived neighborhood safety is related to less physical disability and better perceived health, but only among 50-64 year olds. Better emotional well-being was consistently related to better physical health, but the negative health effects of difficulty obtaining medical services varied by age and health outcome. However, neither variable accounted for the SES-health links. Theoretical and methodological implications are discussed.

Consumption Tax Reform and Older Americans

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Numerous proposals have been offered in the last two Congresses to fundamentally reform the current U. S. tax system. In 1995, several flat tax proposals, the USA (Unlimited Savings Account) tax, and retail sales tax proposals were introduced. Tax reform fervor has reappeared in 1998, with two versions of the retail sales tax dominating the Washington debate. While all these proposals are consumption taxes, they differ in some important details (e.g., how they treat Social Security, how they treat the payroll tax, etc.). Several analyses have compared the distributional impacts of consumption taxes to current law, but none has compared the impacts on the working as compared with the retired population. Because they have different income sources and face somewhat different tax rules, the burdens facing workers and retirees should be different. Furthermore, older Americans are particularly burdened by consumption taxes because they will consume in retirement the assets they have accumulated during their lifetimes, some of which have already been subjected to income taxation. Consumption taxes are theoretically equivalent to a tax on wages and existing capital, so the burden of consumption taxes are particularly harsh on older Americans. The paper will discuss three consumption tax proposals—the flat tax, the USA tax, and the retail sales tax—and estimate their quantitative impacts on workers as compared with retirees.

An Exploratory Analysis of Programs and Policies Affecting Female and Male Elder Inmates in Six Southern States.

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Paralleling the growth trends of elders in the general population, is the growth of elders in state correctional facilities. The purpose of the present study was to determine the size and scope of the elder inmate population in six southern state correctional facilities and to determine issues and concerns facing each state as they accommodated the needs of their "graying prisons." The exploratory study analyzes the administrative policies and procedures that each state provides to service the needs of the male and female elder inmates. States included in the study were Alabama, Arkansas, Georgia, Louisiana, Mississippi, and South Carolina. Cross-sectional samples consisted of 1985 data (865 elder inmates) 1990 data (1,005 elder inmates) and 1997 data with (2,520 elder inmates). Alabama, Arkansas, Georgia, and Mississippi experienced an increase of female elder inmates, with Alabama experiencing the largest increase, a 225% change since 1985. In comparison, Alabama, Georgia, and Mississippi each experienced an increase in elder male inmates with Alabama experiencing the largest percent change (190%) since 1985. Eighty-six percent of the states were concerned about the cost of healthcare, while 14% indicated concern over housing, jobs, and geriatric care of their elder inmates. All states predicted that the growing elder prison population would be a serious problem, within the next 10 years, particularly when it comes to financing the health care of their aging inmates. Implications of the study provide policy and program suggestions to address theses growing concerns.

WEAPONS, TARGET HARDENING, AND SELF IMPOSED HOUSE ARREST: PATTERNS OF ELDER RESPONSE TO FEAR IN URBAN AND SUBURBAN AREAS

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Although elders are among the least victimized among the various age groups, some studies indicate they remain among the most fearful due to increased perceptions of vulnerability. This study describes a series of community based studies in Central Indiana including a core, central city area and the surrounding suburban counties, conducted in 1996-97. Methods of self-protection including self-imposed house arrest or modification of personal social behavior to avoid victimization, gun or other weapon ownership, participation in self-protection courses or other activities, and target hardening of household were compared for Marion County and surrounding suburban counties. Elders in all counties were substantially more likely to modify their behavior by altering nighttime travel patterns than were younger respondents, and they were significantly less likely to own weapons than were younger cohorts. The expected concentration of gun ownership in the central city area was not supported. Instead, suburban residents were more likely to own guns for protection. Age did not influence this relationship. When weapons of all types were considered, the central city residents were more heavily armed than suburban counterparts. The reliance upon guns and other weapons to increase perceptions of safety is a substantial problem in public health due to the propensity for use of available weapons in households in situations of domestic stress. Associated findings in this study identified a subjective component of neighborhood satisfaction as almost completely synonymous with feelings of safety regardless of any objective indicators of unsafe neighborhoods such as crime rates. This relationship was substantiated for all ages.

DO THE ASIAN ELDERLY LIVE IN THEIR DESIRED HOUSEHOLDS?: THE CASE OF KOREA

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While there is an increasing number of studies on the coresidence of the elderly in East Asia with their children, few have addressed whether the elderly live in the households that they desire. Focusing on elderly parents in Korea, this paper examines the association between preferred and actual living arrangements. The analysis of the 1994 Survey of Korean Elderly and the 1993 Focus Group discussions reveals that elderly in better socioeconomic and demographic conditions are more likely than their poorer counterparts to desire separate residence, and to actualize this desire. This finding is consistent with the expectation that some elderly live independently by their own choice. However, the study also reveals that some elderly are living apart from their children against their wishes, due to their children's preference for separate residence or as a result of their children's migration from rural to urban centers. In addition, among the elderly who prefer separate residence, some live with their children to meet the needs of their children. Work on the association between preferred and actual living arrangements contributes to our understanding of how characteristics of the elderly operate for groups with different types of preferences. This is particularly relevant to societies that experience a rapid transition in the norms of coresidence.

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NINE YEARS OF SERVICE LEARNING IN ELDER CARE: PROGRAM TYPOLOGIES, EVALUATIONS AND STRATEGIES

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For the past nine years, faculty at 28 diverse colleges have worked with the FLTC on the development of service learning in elder care. This session will (1) develop a distinct conceptualization of service learning by distinguishing it from internship and practicum models; (2) delineate a typology of service learning models (from the traditional model in which gerontology students conduct friendly visiting as part of their course work to cutting-edge models in architectural design, business, physical therapy and occupational therapy); (3) contrast the special pedagogical issues needed for effective service learning with traditional lecture classes; and (4) contrast findings from two empirical pre- and post-test evaluations of the impact on elders, students, and agency personnel from the different models. One study showed statistically significant positive changes in students' attitudes toward the elderly; another showed extremely high elder satisfaction.

STROKE SCREENING TO COLLECT BASELINE DATA FOR TARGETED STROKE EDUCATION AND PREVENTION: A COLLABORATION BETWEEN NATIONAL STROKE ASSOCIATION, UNIVERSITY RESEARCH, AND COMMUNITY AGENCIES.

Kathleen King, National Stroke Assn., Englewood, CO; L.A. Mjelde-Mossey, University of Colorado; Caren Ermel &

Sheila Kudray, Liberty Heights. The NSA's mission is to reduce the incidence of stroke and stroke-related disability through education, screening, and the promotion of advanced medical care. Stroke is the leading cause of adult disability. Age is a risk factor with 66% of all strokes occurring in those over age 65. The NSA screening model was used to screen 287 members of a senior center and 150 residents of a continuing care retirement community. Seniors were screened for atrial fibrillation, cholesterol, blood pressure, BMI, and carortid bruits. A health history included hypertension, diabetes, TIA's, carotid endarterectomy, stroke, and heart disease. Health behaviors of exercise, smoking, and alcohol were recorded. An RN provided health promotion counselling. Screening results were recorded on a scannable form to generate a health profile of all those screened along with individual risk profiles for plans of self-care. The purpose of this project was to demonstrate the potential of collaborations using the NSA model. Data gathered can support grant proposals, provide baseline for targeted interventions and identify those at high risk.

HEALTH BEHAVIOR CHANGE AT FOLLOW-UP AMONG PARTICIPANT'S IN A COMMUNITY-BASED HEART AND STROKE RISK SCREENING.

L.A. Mjelde-Mossey, University of Colorado Center on Aging, Colorado Springs, CO 80933-7150. Stroke is the leading cause of adult disability and heart disease is the leading cause of death for older adults. Age is a risk factor for stroke with 66% of all strokes occurring in those over age 65. Community wide screenings to identify those at risk or to identify new cases of hypertension, heart disease or stroke have become routine in senior center and community health programming. Monitoring risks such as blood pressure and cholesterol are major elements of an individual senior's plan of self-care. The purpose of this study was to determine if participants in a stroke and heart risk screening report post-screening health behavior change at follow-up. Using the National Stroke Association model, 287 community-dwelling seniors, age 55-89, were screened for atrial fibrillation, cholesterol, blood pressure, BMI, and carortid bruits. A health history including TIA's, carotid endarterectomy, stroke, heart disease, diabetes, and hypertension was taken. Health behaviors such as exercise, smoking, and alcohol were recorded. The last station of the screening provided health promotion counseling by an RN. Logistic regression analysis of predictors of change/no change at 3-month follow-up found no significant associations between identified risk and positive change ($p<.05$).

FIVE YEAR FOLLOW-UP TO THE STATEWIDE MODEL DETECTION AND PREVENTION PROGRAM FOR GERIATRIC ALCOHOLISM.

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In the Fifth Report to Congress on Alcohol and Health, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) identified the elderly as a "special" population at increased risk of alcoholism. The Statewide Model Detection and Prevention Program developed and utilized an informational brochure, booklet, and video in a train-the-trainer model to educate older adults, family caregivers, and service providers about geriatric alcoholism. Recent efforts have focused on a five-year follow-up to explore the extent of knowledge retention and utilization, and discover how the program ultimately impacted those who participated. Data provided by 72 first-level participants who were trained to conduct workshops in their communities verified the program's ability to: 1) serve as an impetus to further training or study experiences (95%), 2) enhance the detection of alcohol problems (71%), and 3) increase the incidence of assistance to individuals with alcohol problems (> 75%). Ancillary data revealed the program's effects on personal drinking habits.

FACTORS ASSOCIATED WITH FOUR DIMENSIONS OF SENIOR CENTER INVOLVEMENT

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The purpose of the present study was to investigate correlates of senior center involvement. The present study extends the previous literature by utilizing Krout's (1991) suggestion of conceptualizing senior center involvement as a multidimensional variable. Dimensions examined in the present study include frequency of attendance, duration of attendance, participation in social activities, and use of social services. Independent variables include: sociodemographic characteristics, health and well being, access, social contact, importance of daily meal, and social loss. The sample consisted of eighty-nine participants from three Citipark senior centers in Pittsburgh, Pennsylvania. Results of bivariate analysis indicate that those who are female, older, live alone, don't drive their own car, and feel that the daily meal is important to their food intake are more likely to be frequent attenders. Respondents with less education, those who have lived in Pittsburgh longer, those who don't drive, and those who do not participate in religious or volunteer activities are more likely to have attended for a longer time. Significant correlates of participation in activities include being a woman with more education, better health, and participation in volunteer work. The only significant correlate of service utilization was greater education.

DIFFERENTIATING MAJOR DEPRESSION AND ADJUSTMENT DISORDER IN GERIATRIC MEDICAL OUTPATIENTS USING A BRIEF DEPRESSION SCREEN

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Differential diagnosis of clinical depression and adjustment disorders in elderly medical outpatients is necessary to clarify the etiology of presenting problems and to determine appropriate treatment. For example, individuals with both disorders benefit from antidepressant treatment, yet following resolution of the stressors and depression associated with adjustment disorder, these patients may be less likely to require maintenance psychopharmaceutical treatment than patients with clinical depression. Although brief depression screens have utility in identifying depressive symptoms and differentiating major and minor depression in some populations, we could find no studies addressing the ability of screens to distinguish these disorders in elderly patients presenting to primary care clinics.

We investigated the utility of the short form of the Geriatric Depression Scale (GDS-SF; Sheikh & Yesavage, 1986) to differentiate Major Depression (MD) and Adjustment Disorder with depressed mood (ADJ) in a subset of patients during their first visit to a geriatric medicine outpatient clinic. During the six year period that data were collected, 625 new patients were seen in the clinic. Diagnosis was made by a clinical geropsychologist based on behavioral observation, interview, history, and total score on the GDS-SF. Although 117 participants scored above the cut-off suggestive of significant symptoms of depression, 45 of these subjects were diagnosed with MD, 33 with ADJ, 13 with other diagnoses, and 26 with no psychogenic pathology.

Total score on the GDS-SF did not discriminate the participants with MD (M=9.6, sd=2.6) and ADJ (M=8.4, sd=1.8). However, two items were endorsed differently. Participants with MD acknowledged poor spirits (X^2=6.4, p<.02) and low energy (X^2=4.5, p<04) more often than the ADJ group. Linear discriminant analysis using these two items accurately classified 67% of the cases (Lamba=.89, p<.02).

Results support previous findings that GDS total score should not be used alone to determine etiology of depressive symptoms. However, reviewing responses on specific items may assist in differentiating major depression and adjustment disorder with depressed mood in elderly medical outpatients.

EVALUATION OF A PROJECT TO RE-ENGINEER NURSING HOMES

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Creekview, a demonstration facility based on concepts of self, family, home and neighborhood was constructed and occupied in 1997. Resident assistants are cross-trained to meet all the needs for the nine residents in each of four residentially designed households. A multi-dimensional research agenda was designed to assess health and well-being outcomes for residents, satisfaction and stress outcomes for staff, satisfaction of families, and operational and financial outcomes for the facility. Data from surveys, direct observations, interviews, and archival data were collected one month prior to the relocation, and six months and one year post move. Results are mixed, with some indicators being more positive (increased positive social interaction during meals) and some less positive (more time spent alone in one's room). Implications of the design process for quality of life will be discussed.

PSYCHOSOCIAL INTERVENTION IN STROKE: A PROGRESS REPORT FROM THE F.I.R.S.T. STUDY

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Background: In observational studies, strong social networks and support have been linked to improved recovery from illness including stroke. Few attempts have been made to translate this research into community-based interventions. We report on the progress of a 5-year study to test the efficacy of a psychosocial intervention in older stroke survivors.

Methods: The Families In Recovery from Stroke Trial (FIRST) is a randomized clinical trial in which 290 prospectively enrolled stroke patients are randomized to either usual care (UC) or to a psychosocial intervention (PSI) involving 15 home visits. Intervention sessions lasting 90 minutes involve the stroke survivor and the entire caregiving network. The goals of the PSI include a) stroke education, b) optimal mobilization of the social support network, c) increased cohesion and reduced stress within the network, and d) improved problem solving skills.

Results: To date over 135 patients have been enrolled in FIRST. Lessons learned to date include: 1) important differences exist between traditional psychotherapy and this form of intervention; 2) successful recovery involves negotiation of the dynamics of dependency; and 3) that stroke recovery involves phases of identity transformation involving entry and exit from the "sick role." Case illustrations are provided.

THE PREDICTIVE ABILITY OF THE ANDERSEN-NEWMAN MODEL FOR COMMUNITY SERVICES USE BY OLDER ADULTS.

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The ability of the Anderson-Newman behavioral model of health services utilization to predict use of community and formal home services was assessed in a sample of community-dwelling older adults. Participants were selected at random from a county tax roll and a county registry of public assistance applicants. Duplicate names were removed from the two sampling frames. Data was obtained by interviewer administered questionnaire. Logistic regression analyses regressing service use on variables within the predisposing, enabling and illness/disability domains were used to determine sensitivity, specificity and percentage classified correctly. Results are presented below:

Domain	% correctly classified	Model Sensitivity	Model Specificity
Predisposing	72.9	21.3	91.5
Enabling	73.4	10.6	96.2
Illness/disability	76.8	28.0	94.2
All (combined)	77.7	37.2	92.3

Approximately three-fourths of the sample were correctly classified with each domain performing comparably. Ninety-two percent of non-users were correctly classified by the model while only one-third of service users were correctly identified. In this sample of older adults, the Andersen-Newman model demonstrated better specificity than sensitivity when used to predict community services use.

Challenges to Health Promotion in Nursing Homes

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A total of 180 cognitively intact nursing home residents aged 65 - 101 from five Midwest nursing homes are being interviewed as part of a three year federally funded study of health promotion in nursing homes. The study is being guided by a model that includes the influence of personal and contextual variables on health promoting lifestyle of residents in the nursing home. In the first year of the study, data about resident personal characteristics is being collected using a battery of tools to examine health beliefs and practices, locus of control, and functional ability. Preliminary findings show that the residents are interested in health promotion activities. In addition they tend to rate their health as excellent or good, despite fairly severe health problems. In the following years the focus will be on contextual factors impacting health promoting behaviors for these residents.

Elders' Experience of Help Seeking for Depression

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Qualitative interviews were used to obtain an understanding of the experience of Nebraskans aged 50 and over who reported having had one or more episodes of depressive symptoms. Study participants were asked to tell their stories about symptoms of depression, whether or not they had sought help, and if so, the kinds of help they had obtained. Content of interview transcripts was analyzed using NUD.IST in order to identify themes, similarities and differences providing information useful to health care providers. Little information is available on the help-seeking pathways for dealing with today's most frequently occurring mental health problem, and most has been obtained in quantitative studies. Depressive symptoms varied as did the response to being depressed. Personal resources differed in both quality and usefulness to the individual. Those whose personal resources were insufficient, often looked beyond themselves for help. The responses from sources of help, informal and formal, also ranged in adequacy. Health care providers might well attend to the plea of these elders that someone listen to them and provide help that is responsive to their perception of their situations. In addition, helpers need to validate with them whether or not the assistance is effective. Additional research is needed to further sort the complex interplay of factors shaping the help-seeking pathways chosen by elders who are depressed.

FACTORS ASSOCIATED WITH ELDERLY'S KNOWLEDGE ABOUT ALZHEIMER'S DISEASE.

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Although discussion of Alzheimer's Disease (AD) is increasing in the popular media, knowledge about AD has not been extensively examined in gerontoloigcal research. This study analyzes factors associated with knowledge about AD in an elderly sample. Data from a mail survey was sent to a random sample (N=535) of subjects aged 60 and older in the Northwest Indiana metropolitan area. We performed a hierarchical linear regression analysis to determine the effect of demographic characteristics, knowledge about services for the elderly and information scanning on knowledge about AD. Results indicate that misinformation about AD is widespread among the elderly population. Race and Education level are associated with AD. In addition, general knowledge about services for the elderly is associated with specific knowledge of AD. These findings suggest that there is a need for accurate information about both AD and community services for older people. Results of these analysis indicate the importance of addressing race and education level when disseminating information about services and AD.

THE EXPERIENCES OF ELDERLY PEOPLE AND THE HOME CARE SERVICES IN SCOTLAND

P. Lightbody and M. Gilhooly, Centre of Gerontology & Health Studies, University of Paisley.

The aim of this research was to gain an insight into the potential problems and difficulties experienced by older people (65+) in the North West of Glasgow, using a needs, rather than a service led approach. The area covered encompasses the highest concentration of elderly people in Glasgow. Many are supported by carers, mainly relatives, who receive little or no assistance or support. In the past service provision has tended to be reactive, responding to those who are able to express their needs. However, there is concern that a number of vulnerable people may not be able to access services for a variety of reasons. In this presentation two sub-sets of data will be presented a) data derived from elderly residents using a variety of methods including one to one interviews, informal group interviews, and postal questionnaires, and b) information gathered from Home Helps using the Critical Incident Technique. Results indicated that a) respondents who rated their health as 'poor' also reported having greater difficulty coping with their situation. Just over a quarter of carers, and one-third of non-carers, reported that they had no-one they could rely on for help should the need arise. b) The majority of incidents derived from home helps related to the benefits of enabling older people to remain in their own homes as this was perceived to allow them greater independence, which in turn would lead to enhanced confidence in their own ability to cope; level of input from the Home Care team; illness and loss of confidence; accidents; and difficulties associated with dementia sufferers. Results are discussed in light of the current financial restrictions and cut-backs in the level of home care services.

DID MEDICARE REDUCE MORTALITY AMONG OLDER ADULTS?*

Greg L. Drevenstedt, Samuel H. Preston, Population Studies Center, University of Pennsylvania, 3718 Locust Walk, Philadelphia, PA 19104-6298.

The potential impact Medicare had on mortality among the elderly population is investigated using age-specific death rates from 1959-1978 for white and black Americans aged 40-84. This study takes advantage of Medicare's introduction in 1966 and the program's age criterion for eligibility serving as a 'natural experiment.' Weighted least-squares is used to estimate age-period models separately by race and sex that predict the log of age-period-specific death rates from variables indicating year, age and age^2, and the Medicare-eligible population (aged 65+ after 1966). The Medicare variable allows us to compare the expected change in mortality associated with being in the Medicare-eligible population. Results suggest Medicare-eligible white women and black men had lower mortality (net of year and age) relative to their non-eligible counterparts for all causes combined, but no significant effect is found for white men or black women. Medicare-eligible white men and women appear to have had higher than expected mortality from medically avoidable causes of death, but no significant effects are found for blacks. These results suggest that Medicare did not contribute equitably to the health of the elderly, and they may be instructive for policies designed to revise Medicare benefits and services in the future.

*This research was supported by NIA grant AG 10168-02.

HEALTH CARE ACCESS ISSUES FACING OLDER PERSONS IN RURAL AMERICA: A CASE STUDY OF ALABAMA

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We present a case study of health care service provision in Alabama. While access to health care services is a major issue facing many older persons in America, the problem is often intensified in rural localities by low incomes and fewer health care providers. Alabama is a classic example of this situation: Approximately one-third of the state is classified as rural, while its poverty rate of 17.4 percent ranks it as 11th in the nation. Further exacerbating the problem is a higher than average proportion of older individuals. With 13 percent of its population at 65 years and older, Alabama is just above the national average. This older population is relatively concentrated, however: Twenty-nine of the 67 counties have proportions of 15 percent and over. We use county-level demographic and health care service information to examine access issues facing older persons needing health care in Alabama. Results show that while the size of each county's population as a whole was negatively associated with the number of primary care physicians, the association was significant for those counties with larger proportions of older persons. Race also plays a role: Counties with the highest proportions of both older persons and minorities ranked among the lowest in terms of health care service providers of all types. Implications for older persons' access to health care are discussed.

EVALUATION OF GERONTOPSYCHIATRIC AND GERIATRIC DAY-CARE

S. Zank, C. Schacke, Department of Gerontopsychiatry, Free University Berlin, FRG

Geriatric and gerontopsychiatric day care-units were evaluated. A longitudinal control group design was implemented, compairing 43 day care patients with 40 untreated controls over nine months. Individual growth curves were estimated and group differences were tested by multivariate analysis of variance. There is a significant multivariate effect in emotional well-being measures, univariate analysis reveal that this is mainly due to an increase in life satisfaction and a decrease in depression and social-emotional burden of the day care patients. Relatives report a significant reduction in conflicts between their jobs and care. Furthermore, they report significant reduction in subjective burden by memory and behavior problems of the patients.

PREDICTORS OF PROBLEM BEHAVIOR IN PERSONS WITH DEMENTIA: DATA FROM THE CANADIAN STUDY OF HEALTH AND AGING (CSHA) CAREGIVER REPORTS.

G. Gutman, B.L. Beattie, A. Donald. Simon Fraser Univ. & University of British Columbia, Vancouver, B.C., V6B 5K3

The 22 item Dementia Behavior Disturbance (DBD) scale (Baumgarten, Richer, Gauthier 1990) was completed by caregivers of the 1,048 demented individuals indentified from among the 10,263 randomly selected CSHA participants. For 825 CSHA participants for whom complete predictor variable data were available, DBD items were collapsed into 7 categories. These included the 4 aggessive behaviour categories suggested by Cohen-Mansfield and Billig (1986): agitated aggressive physical (AAP), agitated aggressive verbal (AAV), agitated nonaggressive physical (ANAP), agitated nonaggressive verbal (ANAV) as well as 3 additional categories - emotional affective behaviour (EA), socially unacceptable behaviour (SU) and problems with ADLs (ADL). Logistic regression was undertaken and odds ratios measured. The predictor variables in the analysis included CSHA participants' 3MS scores, ADL performance scores, use of tranquilizers and sedatives, age, gender and type of dementia. Persons reported to show AAP tended to be male (OR 1.6), have a low 3MS score (OR 0.95), and were more likely using tranquilizers (OR 3.3). Those showing AAV had lower 3MS scores (OR 0.99) and received tranquilizers more often (OR 1.6). Those showing ANAV were more likely to be female (OR 1.7) with a slightly higher 3MS (OR 1.1) and tended to take sedatives (OR 1.4). Among persons exhibiting EA, SU and ADL, there were no trends except that they all tended to have low 3MS scores (OR 0.97, 1.07, 0.97). Discussion focuses on the implication of the findings for understanding problem behaviors and developing strategies for interventions that are effective.

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ELDERLY MALES AND HIV/AIDS: A PRESENT AND FUTURE CHALLENGE.

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Social and cultural negativism about sex in elderly people have contributed to the neglect or avoidance of health issues, such as HIV/AIDS and other sexually transmitted diseases (STD) in this population. To obtain information about this aspect, 100 elderly males of 60 years and older were interviewed. Age ranged between 60-90 years, 34% were married and the majority reported social security as their main source of income. Sixty-eight percent informed spouse or girlfriends as sexual partners and the rest, sex workers, drug users and casual partners. Of those who paid for sexual services during the previous year of the research , 63% reported having sex with sex workers during the preceding month. Regarding condom use, 58% indicated never using them, while 21% used them in all occasions. As to obtaining condoms, pharmacies were reported as the main source. AIDS may contribute to transformation in family structure, demographic composition of the elderly and in the patterns of illness. It is important that for both present and future generations of elderly people, STD preventive intervention measures be designed and provided.

Quality of Life and Coping in a Sample of Men, 50+ Years of Age, Living with HIV Disease.

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Background: HIV is rapidly increasing among older men. However, because most AIDS mental health research has focused on younger men living with HIV, little is know about the life-care and mental health needs of older men living with HIV disease.
Method: During 1997, 21 men 50+ years of age reported on coping, quality of life (QOL), and HIV-related problems. Participants (Mean age=54 years) were recruited through Milwaukee's largest AIDS service organization.
Results: The sample was predominantly white (52%), gay-identified (71%), and poor (45% had annual incomes below $10,000). Common psychosocial problems among men were AIDS-related discrimination (42%), poor finances (42%), constant worry about declining health (37%), lack of employment opportunities (35%), stomach pain (14%), and chronic stiffness (14%). The five most common illness-related coping strategies were: positive reappraisal, prayer practices, detachment, hoping for miracles, and denial. Men's overall QOL was most affected by their social well-being and their relationship with their MD, while least affected by their physical well-being.
Conclusions: Mental health interventions for HIV-infected older men are urgently needed. These should address illness-related coping strategies, anxiety related to worsening health, and men's financial circumstance.]

KNOWLEDGE OF HIV/AIDS AND AGING FACTS: AN ANALYSIS OF HEALTH CARE PROVIDERS CARING FOR OLDER ADULTS.

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C.A. Emlet, Solano County Health & Social Services Department, Fairfield, CA 94533.

With the HIV/AIDS epidemic well into its second decade, the presence of older individuals has been well established. Persons aged fifty and older have consistently represented ten to twelve percent of all diagnosed AIDS cases. As mature adults continue to become HIV infected and young adults age with their infection, providers of services to the elderly will faced increasing demands for services from people with HIV or AIDS.

This study measures knowledge of service providers in two states. Items test knowledge of incidence and prevalence, risk reduction behaviors, transmission routes, symptoms and diagnosis, morbidity, and mortality issues. Preliminary data from the NC sample indicate a low level of knowledge, scoring an average of seven correct out of twelve. Over one quarter of the sample answered five or fewer of the true/false questions correctly. Differences between the job categories comprising the sample of aging service providers was not related to higher scores on the knowledge scale.

The final analysis of this data compares AIDS service providers to those in aging services and the influence of geographic location, age, and gender of the respondent. Discussion includes strategies for increasing the factual knowledge of care providers, the importance of cross training members of both care networks, and implementing factual knowledge into care practices.

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DESIGN, IMPLEMENTATION, AND EVALUATION OF GERONTOLOGY TELECOURSES: A CERTIFICATE IN AGING STUDIES ON TELEVISION

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For students in rural areas and practitioners who provide health care to older adults in underserved areas, television is a particularly viable medium for the delivery of university courses in gerontology. Since 1991, a televised 17 credit graduate Certificate in Aging Studies program has offered individuals who would have no other option for acquiring this kind of graduate education the opportunity to earn a credential in gerontology. Analyses of evaluation data from 137 students completing telecourses indicates that: 1) programs are reaching the intended target audience (30% work or practice in a rural setting and 90% identify with a health-related discipline), 2) students are generally satisfied with the format (mean ratings for quality and usefulness were above 4.0 on a 5-point scale), and 3) taking courses had a direct impact on practice (M = 3.82).

Results demonstrate the value and validity of asynchronous learning opportunities that can be provided through telecourses designed to provide flexible delivery of content to those lacking formal education in aging studies.

DEVELOPING A COALITION TO MAXIMIZE TRAINING AND INFORMATION DISSEMINATION IN GERIATRIC EDUCATION

Andrea Sherman, Peri Rosenfeld, Terry Fulmer, Division of Nursing, New York University, Judy Howe, Dept. of Geriatrics, Mt. Sinai Medical Center, John Toner, Columbia University Stroud Center for Geriatrics, Andrea Nevins, Brookdale Center on Aging of Hunter College.

The Consortium of New York Geriatric Education Centers was created in 1997 in response to reduced federal funding and to maximize existing resources in a new structure. Previously there had been two GECs in New York City--the Columbia University-New York GEC and the Hunter/Mt.Sinai GEC. The present Consortium members are: New York University, Columbia University, Maimonides Medical Center, Mount Sinai Medical Center, and Brookdale Center on Aging of Hunter College. The consortium membership represents an array of faculty with diverse knowledge and up-to-date information and best practices. The development of this consortium presents opportunities for the collection and evaluation of standard data elements from a diverse group of institutions, and the development of a model for replication. The poster presents an overview of curriculum innovations such as theme-based elective modules (e.g. quality of life, bioethics), community-academic partnerships, interdisciplinary team training, videotapes, distance learning, and data collection instruments.

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CULTURAL CONTEXTS OF AGING: VALUES AND POLICIES.

T.X. Karner, Gerontology Center, 4089 Dole, University of Kansas, Lawrence, KS 66045

Participants:

K.L. Braun & L. McLaughlin, (Schools of Public Health and Social Work, University of Hawaii, Honolulu 96822) Asian & Pacific Island Cultural Values: Considerations for Health Care Decision Making.

T.X. Karner, (Gerontology Center, 4089 Dole, University of Kansas, Lawrence, KS 66045) Generational Values and Cohort Cultures: Looking to the Future.

V. H. Adams, D. Pope, & R. Coleman, (Psychology Department, University of Kansas, Lawrence, KS 66045) Cultural Values and Quality of Life: Implications for Health Care Utilization.

R.J.V. Montgomery, (Gerontology Center, 4089 Dole, University of Kansas, Lawrence, KS 66045) The Impact of Ideologies and Paradigms on Long Term Care Policies.

Discussant:

E.E. Chapleski, (Institute of Gerontology, Wayne State University, 87 E. Ferry, Detroit, MI 48202)

Abstract:

Social, cultural, political, economic, and geographic factors provide the broad social canvas within which individuals integrate and appropriate their own specific expectations for providing or seeking care for themselves or family members. Each of these factors can be conceptualized as a cultural influence--using "culture" to refer to symbolic of subjective aspects of social life. These understandings and world views provide meanings, values, ideologies, norms, and orientations for their participants. This symposium is guided by an understanding of culture that encompasses both the more common definitions of culture as nationality, ethnicity, or aesthetics as well as applying the insight of cultural analysis to generational propensities toward service utilization and caregiving, attitudes toward decision making, and policy implications. Utilizing a cultural theoretical framework, this symposuim will explore the various contexts of aging: the traditional beliefs and attitudes of Asian Americans; differences between generational values; African Americans' approach to health care; and the ideologies that underlie long term care policies. Drawing on this research, the symposium will discuss the divergent cultural contexts of aging that service providers, researchers, and policy makers need to be more fully apprised of in order to better attend to current and future eldercare issues.

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ENVIRONMENTAL SUPPORTS WHICH ENHANCE THE PERFORMANCE OF OLDER ADULTS IN THE HOME AND COMMUNITY

S. Stark, Washington University School of Medicine, 4444 Forest Park Boulevard, Saint Louis, Missouri, 63108

Participants:

S. Stark & R. Phillips & D. Gray (Washington University School of Medicine, St. Louis Missouri, University of Missouri, Columbia, Missouri) Patterns of Environmental Support for Older Adults in the Home.

C.M. Baum, (Washington University School of Medicine, St. Louis, Missouri) Environmental Issues in Cognitively Impaired Older Adults.

P. Crawford (Missouri State Parks Department, Jefferson City, Missouri) Modifications of a Public Space to Comply with the Americans with Disabilities Act: The Impact on the Performance of Older Adults.

D. Edwards & C. Baum (Washington University School of Medicine, St. Louis, Missouri) The relationship between leisure activity and Quality of Life after Stroke.

Discussants:

B. Schwarz (University of Missouri, Columbia)

Problems associated with the increase in older adults with disabilities include increased functional dependence and institutionalization, increased health care costs, and diminished quality of life. These performance changes are usually a result of a poor fit between the older adult with a disability and the environment in which they function. Older adults with disability, a group with more significant limitations, are at a greater risk for poor person-environment fit. This reduced fit results in diminished performance of self care and leisure activities.

In older adults with disability, leisure activities are the good predictors of quality of life. Maintaining these leisure activities requires environmental modification and support.

Participation for older adults can be improved or enhanced by using environmental modifications to support performance. The purpose of this symposium is to identify strategies for maximizing function by improving the person-environment fit for the older adult in the home and community. A focus on maintaining self care activities and leisure activities will be discussed.

This symposium will review the basic modifications that improve performance for individuals in the home who have cognitive impairments, sensory impairments and motor impairments. The use of activity to predict quality of life in older adults with disabilities will be discussed, and environmental modifications of a State Park will be described as they enhance the performance of older adults pursuing leisure activities. Research and outcome issues will be explored.

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FINDINGS OF *THE NATIONAL ELDER ABUSE INCIDENCE STUDY*

T. Tatara, National Center on Elder Abuse, 810 First Street, NE, Suite 500, Washington, D.C. 20002

Participants:

T. Tatara, Overview, Objectives, and Design of the ***National Elder Abuse Incidence Study.***

J. Gertig, (Westat, Inc. 1650 Research Boulevard, Rockville MD 20850) Methodology: Data Collection, Sampling, Weighting, and Analysis of the ***National Elder Abuse Incidence Study.***

L. Kuzmeskus, (U.S. Bureau of the Census, Population Division, Population Projections Branch, Washington, D.C. 20233) Findings from the Adult Protective Service Agencies involved with the ***National Elder Abuse Incidence Study.***

C. Thomas, (Westat, Inc. 1650 Research Boulevard, Rockville, MD 20850) Findings from the Sentinel Agencies of the ***National Elder Abuse Incidence Study.***

Discussant: R. Wolf, (National Committee for the Prevention of Elder Abuse, Worcester, MA 01605)

The National Elder Abuse Incidence Study represents the nation's first scientific study of the incidence of elder abuse. This study, scheduled for release Spring 1998, was conducted by the National Center on Elder Abuse (NCEA) and their subcontractor, Westat, Inc., with funding from the Administration for Children and Families (ACF) and the Administration on Aging (AoA) of the U.S. Department of Health and Human Services (HHS). This study utilized a sentinel approach methodology to collect data on domestic elder abuse from a national sample of 20 counties using standardized data collection forms.

This symposium will present the findings of this landmark study. It will begin with a review of the legislative background, which supported the study, and an overview of the methodology involved. Specifically, Tatara will serve as the moderator as well as presenting the background and design of the study. Gertig will provide a detailed examination of the process of data collection, sampling, and analysis of the data. Kuzmeskus will present the findings from the Adult Protective Service Agencies, while Thomas will present the national incidence rate and the sentinel findings. The presentation will conclude with a discussion, led by Tatara, of the key findings and the distribution of the executive summary of the study.

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STAGE THEORIES OF HUMAN DEVELOPMENT AND MATURITY: PHILOSOPHICAL, PSYCHOLOGICAL, RELIGIOUS, AND HISTORICAL PERSPECTIVES

R. Manheimer (NC Center for Creative Retirement, UNC-Asheville, Asheville, NC 28804) & H. Moody (Brookdale Center on Aging, Hunter College, CUNY, NY, NY, 10010).

Participants:

R. Manheimer (NC Center for Creative Retirement, UNCA), Wisdom or Folly? Why Contemporary Philosophers Are Silent About Old Age.

J. Sinnott (Psychology Department, Towson University, Baltimore, MD 21252) Achieving Balance: Post-formal Stages of Development in Later Life.

H. Moody (Brookdale Center on Aging, Hunter College, CUNY) Are There Stages to the Soul?: Human Development from the Perspective of Comparative Religion.

A. Achenbaum (Institute of Gerontology, University of Michigan) The Wisdom of Aging: An Historian's Perspective.

Old age has long been regarded as either the crowning achievement or complete undoing of life development. Similarly, life stage theories have mirrored these opposing attitudes. Recently, a number of European and American philosophers have proposed unique ethical characteristics for later life that, in turn, shed light on the whole life course. Following Piaget, Kohlberg and Gilligan, a number of psychologists have argued for the presence of post-formal stages in old age that approximate certain classical definitions of wisdom. The recent aging and spirituality movement has advanced certain claims about transcendence in old age and a special role for elderly seekers. And, in its brief history, the field of gerontology has seen shifting paradigms of a "good" old age, influenced by underlying presupposition and methods of the social sciences and humanities. This symposium will review philosophical, psychological, religious and historical concepts of the culmination of development in old age. The strengths, weakness, and consequences of the various positions will be discussed as they pertain to social policy and the organization of health care, education, and social services.

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OLDER ADULTS AND SUSTAINABLE COMMUNITIES: DESIGN, ACTIVISM, AWARENESS, AND LEGACY

S. Wright. Gerontology Center. University of Utah. Salt Lake City, UT 84112

Participants:

S.Ingman (University of North Texas, Center for Public Service, Denton, TX 76203) Sustainable Communities: Senior and Multi-family Citizen Housing.

P.K. Patterson. (Department of Population-Based Nursing, Oregon Health Sciences University, Portland, OR 97201)

New Urbanism and the Elderly In Suburban and Urban Environments.

N. Chapman (School of Urban Studies and Planning Portland State University, Portland, OR) **Aging In Place in the Neighborhood: Accessory Apartments.**

T. Benjamin, R. Cohen (Environmental Alliance for Senior Involvement - EASI, Catlett, VA 20119) **A Role Model for Statewide Volunteer Projects: Senior Environment Corps.**

S. Wright, D. Lund, M. Caserta (Gerontology Center, University of Utah, SLC, UT 84112) **Environmental and Economic Impact of Retirement Hot Spots: A Case Study of Southwestern Utah.**

Discussants:

H.R. Moody (Brookdale Center on Aging, Hunter College, NY, NY)

William Benson (Environmental Alliance for Senior Involvement -EASI, Catlett, VA 20119)

Environmental issues are becoming more serious concerns for an increasing number of Americans. An aging America presents many potential challenges to preserving and enhancing the environment and thus represents both an opportunity and a challenge into the next century. Changes in resource demand due to population aging may be as significant as changes due to population increase. Conversely, an aging society may also point the way to effective strategies for environmental protection and sustainable communities. For example, many active older adults are using their talent, and energy in local projects to protect the health and environment of communities across the nation. Linked through a national coalition of aging and environmental organizations, older adults are becoming an organized resource to create sustainable communities. The general theme of this symposium is examining the role of older adults in sustainable community development, and specifically to discuss the impact of retirement-recreational communities on natural-social environment systems, and planning and designing high-quality communities to enhance aging-in-place. Discussants will address the issues of legacy and generativity in the older adult population in terms of the sustainable community movement and environmental awareness.

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AGING IN PLACE: THE INTERFACE BETWEEN PUBLIC SENIOR HOUSING AND THE COMMUNITY

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Research describing aging in place has failed to address the interdependence between senior housing and the community. Since local services are the "first line of defense," the present study explored how communities respond to "aging in place" in senior housing.

All towns/cities in Connecticut with public senior housing (N = 94) were contacted to identify the key person responsible for elder services. These key informants were contacted to participate in the research. Each informant was sent a self-administered questionnaire. Usable responses were obtained from 54 respondents (62% response rate).

The interface between public senior housing and the community varied across towns/cities. Size of the elderly population ranged from 5 to 31% (M = 16.3%). Services for elders were predominantly organized around either senior centers (39%) or a specialized unit for elders (28%). Finally, while the vast majority (90%) reported some type of link between human services and the PHA, only 2/5s reported a formal linkage. The public policy implications of the present findings concerning aging in place are discussed.

CHARACTERISTICS OF EXEMPLARY HUD SUBSIDIZED HOUSING FACILITIES: LINKING HOUSING AND SERVICES FOR LOW-INCOME ELDERS

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This research was designed to improve understanding of how to provide supportive services to low-income elders in multi-unit housing using available community resources. The data for this study were derived from the 120 applications for the 1994 Department of Housing and Urban Development's (HUD) Best Practice Award. Characteristics which differentiated the winners from non-winners were identified. Statistical analysis suggests that winners provide access to a significantly greater number of supportive, clinic, and ancillary services and appear to be more adept at manipulating community resources, utilizing outside providers, and engaging multiple providers in the provision of services. The results of this study are useful in the development of multi-unit housing projects serving low-income elders. By identifying and understanding the programs and practices of exemplary projects, methods utilized can be replicated and improved upon, thus enhancing future strategies and techniques for service provision.

DESTINATION, ASSISTED LIVING, VERSUS DESTINATION, NURSING HOME, IN OREGON: FACTORS ACCOUNTING FOR LOCATION DECISIONS.

JR Reinardy, RA Kane, SM Huck, School of Public Health, Univ. of Minnesota, Minneapolis, MN, 55455.

This paper presents findings from a study of 605 ALF tenants and 610 NH residents, comparing and contrasting predictors of relocation for the two randomly chosen samples. The data, taken from the 1st wave of an evaluative study of Oregon's ALF program, are used to ascertain bivariate associations between relocation to an ALF/NH and variables in the following areas: resident's health-related circumstances preceding the relocation, type of residence prior to the move, family and types of practitioners influencing the move, and characteristics of the decision process. A multivariate model, based upon the significant associations, is then used to determine predictors of moving to an ALF vs. NH.

The findings suggest that even in a LTC system such as Oregon's, where alternatives to NHs are established, practitioners are more likely to influence decisions that lead to NH rather than ALF residence.

EVALUATION OF AN ASSISTED LIVING MEDICAID WAIVER PROGRAM

L. Vinton, Institute for Health and Human Services Research, Florida State University, Tallahassee, FL 32306.

In 1995, Florida implemented its Assisted Living Medicaid Waiver program with 210 residents in 62 Assisted Living Facilities (ALF). By August, 1997, there were 450 residents at 83 different ALFs receiving services. The goal of the state's ALF Medicaid Waiver program was to provide supportive services for persons aged 60+ who met specific functional criteria and were in need of additional support and services in order to avoid costly and less preferred nursing home placements. Under the program, eligible residents received case management services and ALFs $25 per day. Waiver recipients tended to be aged 85+, female, have a dementia diagnosis, and need help with 3+ ADLs. Results of the summative evaluation showed that the average monthly Medicaid costs for a six month period were significantly lower for Waiver recipients in the sample (N=73) than for a comparison group of persons (N=301) who had transferred to skilled nursing facilities (SNFs) from ALFs or been assessed for a Medicaid SNF placement ($1,029 vs. $1,573). There were no differences, however, in the rate of nursing home placement or hospitalization for ALF Medicaid Waiver and non-Waiver controls (N=83), thus the diversionary aspect of the program must be investigated further. There was also no difference seen between the groups when mortality rates were examined. While the Waiver recipients had lower levels of emotional well-being at pretest than the controls, at posttest their average score had increased; whereas, for controls, the average score decreased. The difference in emotional well-being from pre- to posttest for the ALF Medicaid Waiver recipients was statistically significant, thereby suggesting a program impact.

ORGANIZATIONAL DETERMINANTS OF RESIDENT SATISFACTION WITH ASSISTED LIVING

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Assisted living, proposed as an alternative to improve quality of life for the frail elderly, is growing nationwide. No comprehensive data exist to address its advantages. This study examined the influence of organizational factors on the quality of life of assisted living residents, using resident satisfaction as the quality indicator. The following organizational factors were taken into account: facility size, physical environment, services, policy autonomy, costs to residents, staff resources, and ownership. The relationships between organizational factors and resident satisfaction were examined while controlling for resident psychological well-being, functional ability, education, and participation in the decision concerning relocation. Data concerning resident satisfaction were collected in personal interviews with 156 residents living in 13 assisted living facilities, selected from among domiciliary care homes in Maryland. A new instrument to measure resident satisfaction was developed for the study. Information on facilities was obtained in interviews with administrators, from direct observation of physical environment, and from facility records. Results indicate that residents who were more satisfied were also happier, more functionally independent, more involved in their housing decision, and less educated. When controlling for resident characteristics, higher levels of resident satisfaction were associated with small facility size, a moderate level of physical amenities, greater availability of personal space, fewer socio-recreational activities, and non-profit ownership. Since only a few organizational factors were significantly related to resident satisfaction, the study cautions us about assuming that higher levels of resources are simple answers for improving the quality of resident life in assisted living. Resident characteristics are stronger predictors of satisfaction than organizational factors. These findings might be helpful in structuring a regulatory approach to assisted living in such a way as to reflect a resident-centered model of care.

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EFFECTS OF POST-HOSPITAL HOME CARE FOR OLDER ADULTS ON HOSPITAL USE AND FUNCTIONAL OUTCOMES.

C.J. Burant, R.H. Fortinsky, D. Kresevic, G. Martin, R.M. Palmer, C.S. Landefeld.

In previous work, we found that an Acute Care for the Elderly (ACE) Unit that emphasizes nurse-driven protocols yielded improved patient (pt) outcomes at hospital discharge. In this study, we offered ACE Unit pts Transitional Care (TC), a home care intervention that continues these protocols to maximize pt. function and minimize hospital readmission. To evaluate TC effects, we compared pts (all aged ≥70 yrs) on the ACE Unit who also received TC (ACE+TC; n=308) with ACE unit pts who did not receive TC (ACE only; n=242), and with pts on usual medical care units who did not receive TC (UC; n=500). Pt outcomes were: length of stay for index hospitalization, hospital readmissions, and three functional outcome measures that are consistent with TC protocols – independence in bathing and dressing (BATH), toileting and continence (TOIL), and mobility and transfer (MOB) at 30 days after discharge. Covariates used in multiple regression models included age, gender, ethnicity, Charlson comorbidity index, APACHE II score, cognitive status, living arrangements, receipt of home health care after discharge, and BATH, TOIL, and MOB at discharge. Among hospital use measures, we found that ACE+TC pts showed a trend toward a shorter length of stay for the index hospitalization compared to the UC group ($p=.07$). ACE+TC pts also were half as likely as UC pts to be readmitted to the hospital within 14 days (OR=0.49; 95% CI=0.25-0.94), and within 21 days (OR=0.53; 95% CI=0.30-0.93). Pts in the ACE only group did not show these trends. Among functional outcome measures, we found that ACE+TC pts and ACE only pts had higher MOB scores at day 30 than UC pts (both at $p<.05$); no group differences were found for BATH or TOIL. We conclude that the primary effect of TC was reduced hospital readmission rates within one month after index hospital discharge. However, TC alone did not appear to influence functional outcomes among study pts. SRPP-9

ORGANIZATIONAL FACTORS RELATED TO THE DISTRIBUTION OF PREVENTIVE, OUTREACH, AND LONG-TERM CARE SERVICES IN HOSPITALS AND HEALTH SYSTEMS.

Connie Evashwick, Sc.D., Peggy Smith, Ph.D., and James Swan, Ph.D., CSULB, Center for Health Care Innovation, 6300 State University Dr., Suite 270, Long Beach, CA 90815.

The purpose of this research was to elucidate organizational factors related to the availability of preventive, outreach, and long-term care services in hospitals and health systems. The methodology was to analyze the data from the 1995 American Hospital

Association annual survey of all U.S. hospitals. The sample was 4554 responding community hospitals. Independent variables included bed size, region, profit status, admissions, and revenue. The dependent variables were 28 preventive, outreach and long-term care services, which were categorized by the organizational arrangement: hospital, health system, joint venture, or network.

Contrary to the hypotheses, very few preventive, outreach, or long-term care services were offered through networks or joint ventures. Moreover, hospitals offered far more than health care systems.

Factor analyses of the 28 services produced no natural groups of services. Three service indices were created for preventive, outreach, and long-term services. The relationship between each index and the independent variable were then examined by correlation and multiple regression analyses.

The researchers conclude that (1) no natural groups of services are evident, and (2) organizational expansion by hospitals, regardless of organizational structure, does not necessarily lead to the expansion of preventive, outreach, or long-term care services.

A PROFESSIONAL-PATIENT PARTNERSHIP MODEL OF DISCHARGE PLANNING WITH ELDERS

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Billions of dollars are spent on hospital care for elders admitted for heart failure. Efforts to curtail costs have resulted in shortened lengths of hospital stay, leaving health care professionals less time in which to identify elders' needs for follow-up care. The Professional-Patient Partnership Model (PPPM) of discharge planning was designed to facilitate early identification of elders' needs. The aims of this study were to: 1) examine differences in outcomes for elders who participated in the PPPM compared to those who received usual discharge planning; 2) examine differences in costs associated with readmission and emergency room use for intervention and control groups; and 3) examine differences in outcomes for family caregivers assisting elders post-hospitalization. Participants in the PPPM (N=55) and those who received usual discharge planning (N=113) were interviewed before discharge, 2 weeks and 2 months post-discharge. The average age of the elders was 74.1 yr (SD=8.9) and the average age of family caregivers was 58.7 yr (SD=15.1). Pre-intervention elder cohorts were not significantly different from the intervention cohort on baseline measures of health status and health locus of control. The results indicated that elders participating in the PPPM reported feeling more prepared to manage care, perceived better continuity of care and reported higher scores on health than the control groups. Days readmitted were fewer for elders in the PPPM than the controls resulting in an average savings of $4000 per patient.

Funded by the Retirement Research Foundation of Chicago

DEVALUED DEATHS: INTEGRATING HOSPICE CARE INTO SERVICES FOR PEOPLE WITH DISABILITIES AND THEIR FAMILIES

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People with developmental disabilities and their families are a group whose lives, deaths and grief society has historically devalued. As increasing numbers of older people with developmental disabilities confront terminal illnesses and deaths of older parents, family members, housemates, friends and staff, development of hospice care services is warranted. Using a systems perspective, this paper delineates interventions designed to support individuals and families, address organizational barriers and coordinate community networks. Recommendations for research and policy strategies are formulated.

Predicting the Hospital Length of Stay (LOS) using the discharge type of transportation.

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PURPOSE:To investigate the impact of discharge type of transportation on hospital LOS in elderly patients.
METHODS: In a prospective study, we evaluated all hospital admissions of patients above the age of 65. Average Length of Stay (ALOS) was calculated from the actual hospital LOS minus the state average LOS for the same DRG (Diagnosis related group). Analysis of variance (F) was considered significant if $F \leq 0.05$.
RESULTS: Data was collected for 112 consecutive admissions. Nine patients expired (8%), and were excluded. There were 5 readmissions.Total number of patients in the study was 102 . ALOS of patients who needed hospital transportation was 4.65 days (28 patients). ALOS of patients discharged with a family member was 1.30 days (69 patients). ALOS of patients discharged by other modalities were 1.8 days (5 patients). No patient was transported home by a spouse. Patients who required hospital transportation home upon discharge had a statistically significantly high hospital L.O.S. ($F \leq 0.014$).
CONCLUSION: The need for hospital transportation home after hospital discharge was highly correlated with increased hospital length of stay.

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RELIABILITY AND ACCEPTANCE OF COMPUTER-ASSISTED DATA COLLECTION IN THE ELDERLY

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Computer-assisted (CA) collection of health services research data in older subjects, most of whom have limited computer literacy, will become increasingly common. Data about the reliability and acceptance of CA testing in this population is limited. The purpose of this study was to examine the test-retest reliability of a CA CES-D (Center for Epidemiologic Studies Depression Scale) and evaluate respondent satisfaction to CA testing in an elderly population (age ≥ 65). Additionally, we compared scores from CA CES-D with those from traditional paper and pencil (PP) instrument. Test-retest reliability was assessed in 19 men who responded to two CA CES-Ds over a one hour period. Comparison of CA and PP CES-D scores was performed in 186 men, mean age 73±5 (mean±SD), who received either a CA (n=107) or PP CES-D (n=79). A cross-over sub-group (n=16) responded to both PP and CA CES-D over a one hour period. CA CES-D subjects used a light pen pointing device to respond to the questions. All comparisons were performed using ANOVA.

There was no statistically significant difference in CES-D scores between men who received the CA or PP CES-D. Completion times for the PP test were 33 seconds less than the CA test ($p<0.05$). The CA CES-D was reliable. The correlation between repeated CA tests was 0.87 ($p<0.001$) and between cross-overs (PP&CA) was 0.95 ($p<0.001$). 95% of the subjects rated readability and use of the light pen either excellent or good. We conclude that CA data collection is a viable and potential cost-effective replacement for traditional PP tests in older populations.

USING A WEBSITE FOR QUALITATIVE GERONTOLOGICAL RESEARCH: ISSUES AND RECOMMENDATIONS.

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The use of the Internet to gather and exchange information has exploded during this decade. The purpose of this research was to observe and analyze a website discussion group over a one year time period to determine the suitability of this forum for qualitative research with Alzheimer's family caregivers. Data from 4600 subject postings on an Alzheimer's Disease listserv discussion group were reviewed. Topics and key themes were able to be identified using the traditional grounded theory approach and saturation became evident after five months. Similar topics were noted in three traditional focus groups conducted for validity and reliability comparisons.

The advantages and disadvantages to web based research will be compared.

Ethical issues arose concerning obtaining informed consent in this medium and protecting the privacy of the research subjects when publicly accessible archives exist. Findings suggest that the Internet provides a new opportunity for qualitative researchers to develop non-traditional methodologies for gerontological research as well as a challenge to ensure traditional research confidentiality.

The Use of Technology to Maximize the Planning, Coordination and Evaluation of Services For Older Persons and Their Families.

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State governments and the aging network face escalating challenges in their work of serving the growing number of elderly persons. Complex categorical grant requirements often result in targeted, highly segmented and specialized service delivery systems. The role of GIS mapping in human services management is currently being defined. The field of aging services, as with other human services, desperately needs accurate data for planning, evaluation and coordination of resources. The purpose of this study was to determine if the use of GIS mapping would provide the SUA with objective management tools to maximize resource allocation to targeted populations. The results provided dynamic representations, through map overlays, of statistical data within familiar geographical boundaries (i.e., identifying overlapping staff responsibilities, geographic areas of program activity, and visual representation of the scope of staff activities throughout the state). This technology provides human service planners tools to plan for change proactively rather than reactively.

SEVEN STEPS TO CREATING A GERONTOLOGY INTERNET COURSE

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There are several ways to incorporate the Internet into gerontological instruction. The integration of technology in general, and the Internet specifically, into university instruction can best be thought of as occurring along a continuum. Traditional university instruction that utilized "less" technology belongs to an obsolete educational paradigm. This type of instruction occurred prior to the widespread use of the Internet, the advent of e-mail, and the explosive growth of personal computing. Today, instruction that utilizes "more" technology, includes not only e-mail but incorporates electronic chat rooms, lectures delivered via the World Wide Web, links to sites relevant to fluid course content and up-to-the-minute access to world-wide current events. This paper attempts to describe the process by which more technology can be utilized in undergraduate and graduate gerontology courses. It outlines the basic steps necessary to integrate the Internet and its vast resources and opportunities into individual courses and gerontology curriculum.

DEVELOPING A CENTER FOR THE ASSESSMENT AND REHABILITATION OF ELDERLY DRIVERS [CAR-ED].

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We describe the mission, organization, and development of a new, innovative center addressing the multiple, complex problems of aging and driving. CAR-ED--dedicated to maximizing the balance between independent mobility and driving safety--was established in early 1998 through partnership agreements among the Dorn VA Medical Center, Palmetto Richland Memorial Hospital, and various Schools in the University of South Carolina. CAR-ED and its core personnel are based at the VA facility in Columbia and its pre-existing driving rehab program. Key additional steps in CAR-ED's evolution have been the expansion of service population to non-veteran elderly, and the acquisition of state-of-the-art capital equipment through a large foundation grant. Finally, we describe the roles of CAR-ED in screening for geriatric assessment and delivering clinical, rehab., legal services & transportation; basic & applied clinical research; applied engineering research & development; technology assessment; clinical & public education; and research to support health, transportation, & public safety policy development.

Identifying Cost Effective Recruitment Strategies for Research Participation by Alzheimer's Disease (AD) Caregivers.

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While the literature reports health research participation among older adults as being generally comparable to rates among younger adults, this is not true for AD caregivers, who are on average, 75 years old. Recruitment problems can significantly compromise the research design, decrease statistical power, prolong field work and data collection leading to increased cost. Given the age-related increase in the prevalence of AD in the context of a rapidly increasing older population, identifying effective recruitment strategies is imperative. A systematic method of recording and describing recruitment activities and associated costs has been implemented. Semi-structured Focus Group and open-ended individual interviews with caregivers who declined participation in a national Alzheimer's study have been conducted and analyzed using a computer-assisted qualitative software program. Comparisons of sociodemographic characteristics will be made between the AD study enrollees and the decliners. We will present an overview of the research methodology and findings from this research to date.

MINORITY ELDERS AND TELEVISION AUDIENCEHOOD

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Television does not usually portray minority elders, and when it does the images tend to marginalize them, yet older members of minority communities often are devoted viewers of television. This study asks what kinds of meanings television holds for members of particular groups of minority elders. The author conducted in-depth interviews with thirteen elders of various races, including gays and lesbians, Russian Jewish and Laotian Hmong immigrants, and Native Americans. The study suggests that these elders use television amid complex personal circumstances and that the subjects shared an interest in viewing that seemed rooted in practicality, offered tools for social learning, and expressed views that resonated with their personal experiences. Across and within membership groups, elders also expressed idiosyncratic views marked by rich experiences. Their diverse viewing patterns were marked by an affection for television as a companion but a skepticism about its portrayals of themselves, other elders, and other members of minority groups.

"A Passive Home Monitor to Summon Help for Elderly Who Fall"

Presenter: Mary Hamil Parker, Ph.D., Executive Director, Senior Housing Research Group, 920 South Alfred Street, Alexandria, VA. 22314

Summary: The poster presents data from a NIA-funded study to develop a passive Home Monitor device which summons help for elderly apartment residents who fall and cannot get up, without the faller interacting with the device. Data also are presented from a follow-up use of this device by a senior housing facility as part of a program to assist frail residents and prevent falls.

Methods: Entry interviews with participating elderly to collect data on health and functional status and history of falls. Recording monthly of data on reported and unreported falls, six-month interview on health and functional status. Data were collected on fear of falling and satisfaction with Home Monitor functions.

Results: Home monitor equipment was able to detect falls and effectively send an alarm to summon help for elderly unable to get up.

Conclusions: The home monitor does detect falls and send alarms. Data showed that fear of falling was unrelated to actual falls. Participants were satisfied with the functions of the Home Monitor.

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Economic position of the Japanese elderly between 1988 and 1994

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Public retirement benefits are the most important income source for elderly households in Japan, especially for the low income class. Among all income sources, public retirement benefits provide more than 50 percent of aggregate income for average elderly households, and earnings are the second important income source, although public retirement benefits are much more important for fully retired elderly. Another key factor is the living arrangement of the elderly.

Now, because of the rapid deterioration of insured-beneficiary ratio in near future, Japanese public retirement benefit system is forced to reestablish long-term financial stability by cutting benefit level with other measures combined.

This paper will discus economic position of the Japanese elderly in terms of income, expenditure and savings according to living arrangement of the elderly aged 65+. We use three national survey data in 1988, 1991, and 1994, in order to analyze if economic position of the elderly improved or worsened in these mid- and post-bubble economy years.

The Gender Gap in Retirement Confidence: Identifying Catalysts to Confidence among Preretiree Cohorts S.J. Devlin, *(Boettner Center of Financial Gerontology, University of Pennsylvania, Philadelphia, PA 19104-6214)*. The feminization of poverty (Stone, 1989) especially among older cohorts has been neglected by researchers and policy-makers. This paper explores financial resources and skills which influence retirement confidence. A national sample of 442 adults (ages 35-64) were interviewed in Feb.1996. The respondents were asked questions about financial resources, financial literacy skills, and confidence/ concern about financial well-being in retirement Separate models for explaining retirement confidence were developed for men and women using a hierarchical logistical regression. Predisposing financial resources were forced into to the model first, followed by financial literacy variables. Analysis of male respondents indicates financial resources distinguish between males concerned and confident. Adding the financial literacy variables significantly improved the model (-2LL=157, $p<.001$). Analysis of female respondents indicates the equation based solely on financial resources was not an improvement over a null model. Addition of the financial literacy variables significantly added to the model (-2LL= 153, $p<.001$). These data suggest existing preretirement education programs designed to improve confidence will not be successful with females if the sole outcome is structural changes in financial resources for retirement.

FACTORS INFLUENCING THE USE OF OLDER WORKERS: A SURVEY OF U.S. EMPLOYERS.

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In order to explore the experience with and attitudes towards older workers, a phone survey of 240 employers was conducted.All industry types were represented in the sample.Employers ranged in size from 2 employees to 90,000+ and were located in 27 states. Employers were asked to describe their plans for older workers in the future and barriers they saw to the use of older workers.

Findings suggest that employers held generally positive attitudes towards older workers but were concerned about a lack of "up-to-date" skills and difficulties training this group of workers. The major barrier to the use of older workers, however, was difficulty in locating older workers. And, although nearly half anticipated an increase in older workers in the future, only 11% had developed a plan for an increase in older workers in their workforce.

The industry and regional differences among employers as well as the public policy and practice implications of the findings will be discussed.

THE SOCIAL SECURITY DEBATE: CAN A NATIONAL CONVERSATION BRING ORDER TO A "POLICY MESS?"

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A year-long national conversation on Social Security is being coordinated by the AARP, the Concord Coalition and the Pew Foundation. As announced in the 1998 State of the Union Address, President Clinton plans to follow this conversation with a White House Conference on Social Security and a bipartisan congressional forum designed to reach agreement on necessary financing reforms. Suggesting that the Social Security issue is what William Dunn (1994) calls a "policy mess, " the paper begins with a discussion of why this is so. Next, drawing on the experiences of two previous presidentially-convened bipartisan commissions--the 1982 National Commission on Social Security Reform and the 1994 Bipartisan Commission on Entitlement and Tax Reform–the likelihood that the proposed process will lead to successful outcomes is discussed. It is suggested that the President's process may serve a number of functions, including building greater consensus on the nature of the problem. However, absent a short-term crisis, the conversation is less likely to pave the way to a bipartisan legislative outcome in advance of the next presidential election. The third section discusses the lessons that can be applied from the experiences of the two commissions and the concluding section calls for broadening the policy discussion. The paper suggest that there is a need to do more to clarify the values driving differing views, to spell out possible outcomes of various policy options, and to frame the issue in the context of a broad understanding of the implications of the aging of the U.S. population.

FINANCIAL PLANNING AND WELL-BEING IN LATER YEARS: A SCOTTISH STUDY

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Financial resources are crucial to maintaining a good quality of life in Scotland, as in other countries. In today's economic climate the ability and willingness of individuals to plan for their own financial security in later years is becoming an increasingly important area for research. A random sample of individuals aged 40 years and over, living in the Paisley / Renfrew area was drawn from the Argyll and Clyde Health Board's Community Health Index. Data was collected via in-depth, semi-structured interviews. The study found great diversity in planning behaviour; some respondents had thought a great deal about their financial future, while others had not planned at all. Occupational pensions were found to be the most common means of ensuring future financial security. Objective economic status was strongly related to planning behaviour, although the direction of this relationship remains unclear. Attitudinal factors, which may be amenable to change, appeared to play an important role in the decision to plan for the future.

IMPACT OF UNIVERSAL HEALTH INSURANCE ON THE USE OF HEALTH SERVICES BY ELDER ADULTS IN TAIWAN

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The aim of this study is to evaluate the effects of National Health Insurance (NHI), implemented in 1995, on the utilization of health services by the elderly in Taiwan. A national probability sample of 2,525 elderly were interviewed in 1993 and in 1996, before and after the implementation of NHI. The results show that physician visits and hospital days increased significantly after NHI, particularly for those newly insured. Among the newly insured, the number of physician visits and hospital days increased by about 4 and 3 times respectively after NHI, while the previously insured only increased their physician visits and hospital days by about two folds. When further classified by health change between the two interviews, for those who reported worse self-rated health in the second interview, the newly insured had 7 times more of physician visits after NHI, while the previously insured only increased the number of visits by 3 times. However, for those whose self-rated health were the same or better, NHI has no significant effect on physician visits, regardless of prior insurance status. Similar patterns were found regarding hospital days. It appears that after the implementation of NHI, the newly insured tend to consume disproportionately more health resources compared to the previously insured, even after controlling for health status.

FACTORS THAT AFFECT IMPLEMENTATION OF THE HEALTH AND WELFARE PLAN FOR THE ELDERLY IN JAPAN - MUNICIPALITY TYPE -

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Japan started a bold initiative (The New Gold Plan) to increase the formal long-term care system for the elderly to augment traditional family care. Under this plan, each municipality in Japan is mandated to develop a Health and Welfare Plan for the Elderly that meets its unique needs. Data from Nikkei Industry and Consumer Research Institute in Japan (nationwide mail survey, n=1931, 1995) was used to examine factors that affect successful implementation by municipality types.

Multiple regression was employed. Dependent variables examined included levels of goal achievement of home helper service, day service, short stay service, nursing home bed and advanced program implementation. Statistically significant predictors for successful implementation varied by municipality types. For example, for cities(n=440) the proportion of older people, financial power index and home helper service utilization were relatively consistent predictors for successful implementation. For towns (n=1148), however, perceived feasibility and short stay service utilization were consistent predictors for home helper service goal achievement and advanced program implementation. For villages(n=343), only the proportion of older people was consistently predictive of successful implementation.

FINANCING LONG-TERM CARE: DOES THE GERMAN MODEL WORK?

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In January 1995 a statutory Long Term Care Insurance (Pflegeversicherung) came into force in Germany as the fifth pillar of the social security system. This insurance - which gives insurance coverage to all German citizens - provides different kinds of benefits for persons in need of community based or institutional care. In the meantime, first data on the Long Term Care Insurance are available which are also based on own research activities. These data refer especially to the following aspects:

- socio-demographic structure and preferences of the users,
- effects of the Insurance on family caregiving,
- income and expenditure of the Insurance,
- development of the social service delivery system,
- reactions of public authorities (e.g., state and local government).

By touching these aspects, the the aim of the presentation is to give an overview on how the Long Term Care Insurance worked in practice sofar. In this context, observable weak points of the Insurance together with some ideas how to overcome them in the future are discussed also.

FACTORS DETERMINING EMPLOYEE CITIZENSHIP IN LONG TERM CARE.

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What factors determine employee attitudes about organizational citizenship? Do employees become more active organizational citizens as they age? In this study of employees in an age diverse long term care environment (N=74), employees were asked about what specific behaviors led to organizational cooperation beyond role prescription. The Organizational Citizenship Behavior (OCB) scale (Smith, etal., '83) assumes that many of the contributions of citizenship are aggregated over time and enhance organizations (Organ & Konovsky, '89).

Results from the multiple regression analysis found that employees having eldercare responsibility for their relatives, longer years of employment within the organization, more hours of overtime work, and higher scores on the job innovation scale (Koys & DeCotiis, '91), reported higher levels of organizational citizenship. Employee age, health status, education, and income were not statistically significant. The significance of the overall regression was (p=.001) Implications for an older, diverse workforce are discussed.

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IN-SERVICE TRAINING IN LONG TERM CARE FACILITIES

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As part of a study on Behavioral Consequences of Vision Care for Persons with Dementia funded by the NYS Department of Health LTC Services, a training curriculum was developed for nursing staff in Long Term Care (LTC) facilities. Training was done in two segments. In both, pre- and post-tests were administered. Session one presented an award winning film on vision impairment including the simulation of how persons with frequently occurring age related visual impairments perceive their environment. The film demonstrated effective interventions for staff who work with visually impaired residents.

Session two was held one week after the film presentation. It consisted of didactic and interactive teaching designed to reinforce the film.

Results of the pre- and post-tests revealed that in session one – the film – there was no significant gain in knowledge. However, in session two, where there was interactive involvement, significant changes in knowledge occurred. Results suggest that staff training requires a particular kind of involvement for learning to occur. Implications for in-service educational training techniques in LTC facilities will be addressed. Implications are applicable to other settings as well.

A TRAIN-THE-TRAINER PROGRAM IN DEMENTIA CARE: EFFECTIVENESS AND LIMITATIONS.

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The literature on dementia care emphasizes the importance of staff who are knowledgeable and skilled in the care of persons with dementia. For many dementia programs, recruiting and retaining staff are the most persistent management problems. For programs that do not provide ongoing staff training, high staff turnover will eventually result in an untrained staff. To assist dementia programs in developing and conducting ongoing training, the Alzheimers' Association Tampa Bay Chapter designed a train-the-trainer (TTT) program. Thirty-five health care professionals have completed the one-day workshop. Follow-up mail and phone surveys of TTT participants indicate that 70% are no longer employed in their programs, presenting concerns as to the effectiveness and limitations of a TTT program for this group. These concerns, as well as a description of the TTT program and outcome evaluations will be presented.

EFFECTS OF AN INTERDISCIPLINARY TEAM TRAINING PILOT PROGRAM

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Interdisciplinary teams are an important contribution to quality geriatric care. As a demonstration project of the John A. Hartford Foundation's Geriatric Team Training (GITT) initiative, the Great Lakes GITT has applied Peter Senge's concept of learning organizations to interdisciplinary healthcare teams in practice sites involving a range of academic and provider organizations in Cleveland and Detroit. The project is designed to transform the ways health care professionals function as effective interdisciplinary learning teams by working through cyles of reflection, learning and doing. We report the results of the initial 4 month pilot study consisting of a 1 1/2 day workshop, on-going facilitation of learning teams, and a one day wrap-up session. Participants were nurses (36%), social workers (27%), physicians (10%) and other health professions (27%). Comparison of pre- and post-test results on measures of attitudes towards the role of physicians in teams, benefit-cost ratio of team care, quality of care, and team skills found relatively few changes. Exceptions were: 1) increased perceptions of the benefit-cost ratio of team care (P = .06) and greater team skills (P = .02). In general, attitudes towards interdisciplinary team care were positive from the beginning.

The results were used to make modifications in the training program that would enhance practitioners' knowledge and skill to work collaboratively across disciplines to continuously improve their practice. This project is supported by funding from The John A. Hartford Foundation, Inc. of New York and The Cleveland Foundation.

OFFICE CALLS: AN INNOVATIVE APPROACH TO TARGETING DEMENTIA EDUCATION TO PRIMARY CARE PHYSICIANS

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Family members often first seek information and advice from a primary care physician when they are caring for someone with dementia. Unfortunately, many primary care physicians are not adequately prepared to respond to their concerns. Common approaches to increasing knowledge and awareness of dementia among physicians, such as traditional continuing medical education programs, often have little effect on physician behavior. An innovative physician education initiative developed as part of the Community Outreach Education Program (COEP) of the MADRC partners physicians with health educators and home health care agency representatives. The goal of the Physician Outreach Program (POP) is to disseminate information about dementia diagnosis, assessment, treatment, and community services to primary care physicians. Health educators develop the educational materials and oversee the program. Over a one-year period, home health care agency representatives visit physicians about once every two months to deliver materials and assess the physicians' ongoing educational needs. The POP has been successfully implemented in the Saginaw, Bay City, Midland, and Grand Rapids areas with 18 physicians. At least 40 additional physicians will be invited to participate in the program. Preliminary data suggest that the program is appropriately tailored to the participants' identified educational needs. Knowledge, attitude, and behavior change will be assessed at each visit, and a comprehensive program evaluation will be conducted after one year. Lessons learned about this innovative approach to targeting dementia education to primary care physicians will be discussed.

Medicare Knowledge Among Medical Students, Internal Medicine (IM) Residents and Faculty.

VML Roche MB, MF Johnson MD. Center on Aging, University of Colorado Health Sciences Center Denver, CO.

Background:Each year Medicare exceeds more than $150 billion in total expenditures. Up to 99% of Americans 65yrs+ are eligible for Medicare. Objective:To determine Medicare knowledge among housestaff and attending physicians in an academic program. Methods:A questionnaire testing Medicare knowledge was completed by 61 housestaff (22 medical students (MSIII, MSIV) and 39 IM residents), and 26 IM primary care attendings at the University of Colorado. Results:100% housestaff had little/no Medicare knowledge, 57% didn't know hospital admissions require deductibles, 40% thought Medicare covers Assistive Living, 60% thought prescription drugs are covered, & 19% that it covers LTC. 92% faculty knew little/nothing about Medicare, 42% didn't know hospital admission deductibles are >$50 & 35% thought LTC was covered. Conclusions:Despite current focus on health care costs, we found that housestaff and academic faculty had poor understanding of basic Medicare benefits.

TAILORING TEAM TRAINING TO DISCIPLINE-SPECIFIC NEEDS AND AGENDAS. [1]N.L. Wilson, [1]A. M. Woods, [2]L. Coutts, [1]D.M. Long, Huffington Center on Aging, [1]Department of Medicine, [2]Department of Family Medicine, Baylor College of Medicine, One Baylor Plaza, Houston, Texas 77030; V. Fay, University of Texas School of Nursing.

All primary care health professions recognize that teamwork skills are essential in geriatric care within a managed care environment. However, many training programs have traditionally relied upon clinical rotations as the exclusive opportunity for trainees to acquire understanding of other disciplines and skills for effective interdisciplinary interaction.

The Houston Geriatric Interdisciplinary Team Training project, one of eight sites in a John A. Hartford Foundation, Inc. initiative has developed, implemented and evaluated alternative didactic approaches to infusion of geriatric team training content into required activities for seven disciplines including semester seminars, workshops, and small group classroom instruction. Poster content will present the objectives, format and resources utilized for the core approaches including exercises, case studies, and standardized patients for team training. The challenges and achievements will be highlighted for each participating discipline with an emphasis on how to match didactic training with the clinical maturity and experience levels of different trainee groups.

Getting Geriatrics Into the Curriculum: Using Research to Facilitate Educational Change

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This presentation will discuss the findings of a survey on geriatric education at baccalaureate nursing programs throughout the nation. The survey was mailed to all 598 baccalaureate nursing programs in the US: 480 completed surveys were returned, representing an 80.3% response rate.

The survey addressed the degree to which geriatric content is integrated in one or more courses of the curriculum or provided in stand alone courses. Programs identified barriers to incorporating geriatrics into the curriculum such as *curriculum already overloaded*, *lack of role models/preceptors in clinical settings* and *lack of clearly articulated curricula*

Using a combination of five variables, a measure was developed to identify centers of excellence in geriatric nursing. No school met all 5 criteria. Sixteen schools met of 4 of the criteria.

These data will be mined to design programs to assist schools of nursing to enhance and improve the geriatric content within their curricula.

TEACHING TEAMWORK THROUGH STANDARDIZED PATIENTS AND VIDEO FEEDBACK

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The new millennium will see a rapidly growing older population necessitating well prepared health professionals from many disciplines. This session describes a program at The Mount Sinai Medical Center, The Geriatrics Interdisciplinary Team Training (GITT) Program, funded by the John A. Hartford Foundation, which prepares future social workers, nurses, and physicians to work on interdisciplinary geriatrics teams. In addition to a need to prepare the future health care work force in geriatrics, there is a need for the inclusion of new technologies in teaching and assessment. We have incorporated the use of standardized patients and videotaping to enhance team skills in an interactive and experiential format. Trainees individually interview a standardized patient portrayed by a specially trained actor in an initial assessment and then come together as an interdisciplinary "team" to develop a plan of care. Each session is videotaped and faculty view the trainees in an observation theater, assessing students' strengths and weaknesses in effective team behavior. Faculty then join the students in an interactive session to provide immediate, constructive feedback. This session will include a demonstration of a videotape of past program exercises.

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ADDRESSING ANXIETY ABOUT ACQUIRING A DISABILITY: A MODEL FROM THE DISABILITY RIGHTS COMMUNITY

R.L. Beaulaurier, Sch. of Soc. Wrk. FL Intl. Univ., No. Miami, FL 33181 & S.H. Taylor, Sch. of Soc. Wrk. Univ. of Southern Cal. L.A. CA 90089.

It is likely that at some point in their lives most people will develop sensory and/or mobility related impairments that can limit their range of activities. This can result in considerable anxiety as people age. Recently, however, innovative programs and services have been designed to make it easier for disabled people of all ages to choose to remain integrated in mainstream community settings. Laws such as the *Americans with Disabilities Act* and *The Rehabilitation Act* have mandated structural changes in physical environments and/or funded services that allow disabled people considerably more choices about how and where to live, as well as to facilitate their accomplishment of everyday chores such as shopping, using public and private transportation, etc. In order to provide such education and services to people with disabilities, relatively new agencies have emerged that have become valuable resources for the disability rights community. One example are Centers for Independent Living (CILs) which have developed training programs of potential benefit to seniors at risk of developing disabling conditions, by (1) dispelling stereotypes and myths about disabilities; (2) providing information about concrete services and benefits designed to help people retain their independence; (3) providing seniors with locally relevant strategies for seeking new benefits as well as obtaining benefits to which they are entitled; and (4) linking seniors with peer support networks of disabled people across the age spectrum, who have been successful at maintaining their independence and an active life-style. This paper will propose and set forth a model of training for seniors based on those used by CILs, and a plan for evaluating the effectiveness of such programs.

THE ROLE OF HIGHER EDUCATION IN SERVING THE NEEDS OF THE AGING POPULATION

J. W. Weaver, S. Dunn, S. R. Ingman, Texas Institute for Research and Education on Aging, University of North Texas, P.O. Box 310919, Denton, TX 76203-0919.

Of the many external pressures affecting higher education, the "graying of America" is among the most significant. Educators are pressured to develop innovative models to address issues pertaining to an aging society. The Texas Institute for Research and Education on Aging (TIREA) at the University of North Texas has conducted a study of methods and recommendations that colleges and universities can use in their teaching, research, and service roles to better serve the needs of an aging population.

Historically, schools and universities that offer gerontology and geriatrics programs have addressed aging issues from a clinical perspective. The increase in retirement-age persons exacerbates the need for higher education to address broader societal needs including the workforce in general, lifespan development, and changes in the demographic make-up of college campuses.

Upcoming population shifts will result in dramatic shortages of workers throughout the American labor pool. Industrial and labor-intensive fields will need to seek ways to attract and train professionals and non-professionals, particularly older adults, for a host of entry-level positions. Higher education also plays a key role in providing information that will benefit people throughout their life span. Learning experiences for grades K-16, as well as for older learners, should assist students in becoming better prepared to deal with their own aging and with aging issues in their family and work experiences. This presentation will present findings from TIREA's study and recommendations that universities can use in meeting the needs associated with labor force supply, health and social services, and life-long learning.

CONSUMER EMPOWERMENT THROUGH EDUCATION

R. Filinson, Gerontology Center, Rhode Island College, Providence, RI 02908

Aging 2000 is a statewide organization concerned with improving the quality of geriatric health care delivery in Rhode Island through consumer empowerment. Consumer empowerment stems from educating seniors about new health coverage options and impending changes, developing performance indicators to gauge the qualitiy of services offered by health plans and providers, and encouraging seniors to take greater responsibility for maintaining health. Among its activities are volunteer-run educational programs which provide an inexpensive and flexible means of training in behavior modification, self-care techniques and problem-solving. The educational programs begin with the assumption that health care should be goal-oriented rather than problem-oriented, goals which are defined by the individual and accomplished through changes in behavior, social relationships and the physical environment. Two such programs evaluated to gauge their impact are "Take Charge of Your Health"--a five session health promotion workshop facilitated by trained senior volunteers--and the "Peer Mentor Program" in which retired professionals assist health and social service agency clients in meeting mutually agreed upon goals. Research gathered both subjective feedback from participants and objective measures of behavior change. The evaluations underscore the viability of utilizing older volunteers to educate peers about health, encourage behavior change, and assist them in remaining independent. The Peer Mentor Program however had more difficulty attracting volunteers and achieving actual change.

GERONTOLOGICAL ACTION RESEARCH: A COMMUNITY-BASED MODEL FOR RESEARCH AND TEACHING

D. M. Kutzik, D. Porpora, A. Glascock,
Department of Psychology, Sociology and Anthropology, Drexel Univ., 3141 Chestnut St., Phila. PA 19104.

This paper will discuss a way of combining gerontological research and education which meets the needs not only of a community of scholars, but also of students, elderly subjects of the research and community-based service and advocacy organizations. Combining "service learning", in which students are placed in field settings, and "action research"-- research in which the community being studied participates in and directly benefits from the results of research, this process model has brought together students, senior volunteers, Americorp workers and professional service staff in research with direct value to all involved. Students were able to conduct research projects in a 'real life' intergenerational setting. Volunteer seniors were involved in all phases of the research from questionnaire design and interviewing to interpretation of the results. Professional staff from senior centers and the AAA worked with the PI's, students and seniors to answer research questions vital to their ability to assess and upgrade their service programs. The paper will focus on the lessons learned from four action research gerontology projects with an emphasis on the replicable aspects of the process model as well as its substantive, methodological and ethical merits as an alternative to the "research for research's sake" approach that is endemic to much academic gerontology.

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CAREER PROGRESSION IN GERONTOLOGY: A THIRD FOLLOW-UP STUDY OF GERONTOLOGY CERTIFICATE GRADUATES

G.L. Euster, College of Social Work, University of South Carolina, Columbia, SC 29208

The graduate certificate in gerontology continues as the most widely awarded gerontology education credential in American institutions of higher education (Peterson, Wendt, and Douglass, 1994). Over 200 gerontology certificate programs have enabled graduate students from a widening array of disciplines to gain an appreciation of the multidisciplinary nature of the field and acquire familiarity with principles and practice methods ordinarily not taught within their own programs of study. The University of South Carolina has offered a 21 credit hour interdisciplinary certificate of graduate study in gerontology since 1979. This third follow-up study of graduates (N-152) differs from the first two, additionally examining their career progression in gerontology/geriatrics settings since completion of studies. The Standardized Survey Instrument for Graduates of Gerontology Programs, developed by the Association for Gerontology in Higher Education, provided important data about graduates' academic credentials, organizational settings, primary and secondary work activities, salary levels, and useful components of the educational program. Significant career progression into executive, administrative, management, and direct practice positions in aging, health care, and other settings that serve older adults was identified by many graduates. Analysis of data further supports the educational goals and multidisciplinary focus of the gerontology education program.

TWENTY YEARS OF GRADUATES OF A MA PROGRAM IN GERONTOLOGY: THE WICHITA STATE UNIVERSITY EXPERIENCE.

William C. Hays, Ph.D., Gerontology Program, Hugo Wall School, Wichita State University, Box 0135, Wichita, KS, 67206-0135.

The Masters of Arts degree program in Gerontology was established in 1977. This presentation uses the *Standardized Survey Instrument for Graduates of Gerontology Program* Developed by AGHE to analyze the experiences of the more than 125 graduates of the program. The *Standardized Survey Instrument* includes information on the assessment of graduates of the strengths and weaknesses of the program, information on difficulty in finding employment, type of employment, and current salary information. Extensive graphics are used to portray the information.

HOW TO PREPARE SOCIAL WORK STUDENTS FOR THEIR FUTURE ROLES ON GERIATRICS INTERDISCIPLINARY TEAMS

J.L. Howe, M.J. Mellor, Dept. of Geriatrics, Mt. Sinai Med. Center, New York, N.Y. 10029; D. Lindeman, Rush Institute for Healthy Aging, Chicago, IL 60612; M. Luptak, Dept. of Family Practice and Community Health, Univ. of Minn. Minneapolis, MN 55414; N. Wadsworth, Western Reserve GEC, Cleveland, OH 44120; L. West, Univ. of So. Florida, Tampa, FL 33612.

The Geriatrics Interdisciplinary Team Training (GITT) Program, supported by the John A. Hartford Foundation, is a national initiative to prepare future health professionals to work on interdisciplinary geriatrics teams. The targeted disciplines are social work, advanced practice nursing, and medicine. With an increasingly frail older population, a shift to managed care, and a greater emphasis on home and community based settings, the role of the social worker in team-based assessment and care planning has become more complex and challenging. This poster presents an overview of how the GITT sites are teaching teamwork to social work students in a range of community and hospital based field placements through didactic, experiential and clinical approaches, and presents unique methods developed by the sites. These include case studies; use of videotapes and feedback sessions; standardized patients; integration of didactic knowledge and clinical experience through journaling and formalized sessions; glossaries; "real time" interactive team exercises, and training videos. Curriculum materials such as reading lists and case studies will be made available.

GENERATIONAL MEMORY AND TIP-OF-THE-TONGUE PHENOMENON IN OLDER ADULTS: TWO EXPERIENTIAL LEARNING ACTIVITIES FOR UNDERGRADUATE INSTRUCTION.

A. Johnson and S. Fried, Park College, Parkville, MO 64152.

Two learning activities have been constructed to demonstrate older adult memory processes. The first activity demonstrates the concept of generational memory, which refers to a personal bias to favor or identify with those events that occurred in one's teens and twenties. The second activity explores older adult memory and the Tip-of-the-Tongue Phenomenon (TOT). Many older adults have difficulty producing specific semantic responses to memory questions, which may be a form of TOT. This activity includes a demonstration of retrieval cues. Active strategies, by calling upon the students to analyze, synthesize, and evaluate, assist the student in understanding the abstract concepts of memory processes. This poster session includes experiential learning strategies for understanding these memory types and processes in older adults. The following elements are included for each learning activity: (a) objectives, (b) approximate time required for completion, (c) procedure, (d) discussion questions, (e) bibliography for instructors, (f) an activity sheet, and (g) a format for evaluating the activity.

DESIGNING AN ON-LINE UNDERGRADUATE COURSE ON ADULT DEVELOPMENT, AGING, AND DIVERSITY.

S. Fried and T. Peterman, Park College, Parkville, MO 64152 and C. Mehrotra, The College of St. Scholastica, Duluth, MN 55811.

With the goal of furthering our institutions' mission to offer widespread access to undergraduate education, we designed an on-line course on adult development, aging, and diversity. The following objectives provide the foundation for this eight-week virtual learning course: (a) increase students' awareness of their own diversity, (b) broaden their world view, (c) enhance culturally relevant skills, (d) promote an understanding of the life course perspective, (e) foster a multiethnic perspective, and (f) provide a wide variety of activity-based learning experiences. Offered on-line to Park College students nationwide, the course is asynchronous-students work from home at times convenient to them. They interact with content, instructors, and peers. This poster also includes a discussion of advantages and pitfalls of this use of the virtual classroom, a course syllabus, and a sample of on-line learning activities.

UNDERGRADUATE STUDENTS' ATTITUDE AND KNOWLEDGE ABOUT OLDER ADULTS: A COMPARATIVE STUDY

JoAnn Damron-Rodriguez, GRECC (11G), West Los Angeles VAMC, 11301 Wilshire Blvd., Los Angeles, CA, 90073, Brooke Funderburk, UCLA Center on Aging, David H. Solomon, RAND Corporation.

Purpose: UCLA has recently (1995) instituted gerontology course electives. This allowed for comparison of students who took aging courses with those who did not. **Methods**: Undergraduate students who have taken a course in aging (n=382) and a stratified random sample comparison group (n=771) were asked to self-assess knowledge and attitude as measured by post-test validated instruments (Palmore's Facts on Aging Quiz and Rosencranz and McNevin's Aging Semantic Differential). **Results**: Respondent undergraduate students who enroll in aging courses are predominantly women (68%) and 25 years old or younger (89%). Student enrollment by ethnicity has included European-American (40%), Asian American (39%), Hispanic (14%), African-American (5%) and Other (2%). Respondents' age and ethnic composition reflect the diverse UCLA undergraduate population. Consistent with previous studies, women are over-represented in aging courses. Demographic, experiential, and course variables are described in relationship to knowledge and attitude outcomes. **Conclusions**: This research investigates electives and finds, in comparison to previous research, younger and more diverse populations taking elective courses. Multiple discipline elective courses in the undergraduate curriculum warrant further investigation as a means of impacting student attitudes and knowledge.

RESEARCH TRAINING IN PSYCHOLOGY OF AGING.

C. Mehrotra, The College of St. Scholastica, 1200 Kenwood Avenue, Duluth, MN 55811.

With NIA support, we have designed an advanced training program in research methodology for psychology faculty from four-year colleges. Specific objectives include: 1) increasing participants' knowledge, skills, and motivation for pursing an ongoing program of aging research; 2) providing participants an opportunity to interact intensively with senior investigators representing a variety of interests; 3) increasing participants' awareness of grant support available for exploring new directions in aging research and providing them an opportunity to interact with NIA staff; 4) strengthening participants' knowledge and skills related to the preparation of manuscripts for publication and dissemination; and 5) promoting the development of networking relationships among psychology faculty. Program design includes an initial two-week institute, ongoing consultation during the academic year, and a follow-up institute which provides participants the opportunity to share their research proposals with each other and with the program faculty. Institute topics include: Research Design & Analysis, Issues & Approaches for Gerontechnology Research, Evaluation of Interventions, Assessing Older Adults, Issues in Research on Ethnicity & Aging, Seeking Grant Support, and Dissemination & Publication. The proposed session will present (a) outlines of the program sessions, (b) evaluation of the activities undertaken to date, and (c) plans for continuing the program during the next two years.

Title:'Bridging the Gap in the UK: The impact of an Intergenerational Mentoring Programme'.

Dr.SW Ellis Manchester Metropolitan University,
Crewe School of Education. Cheshire UK CW1 5DU

Rapid social change over the last two decades has brought into sharp focus the relationships between different generations. One result of this is that although there are now more generations children and young people may well lose contact with older generations, both within their family networks and within the wider community.

Against this background this paper will seek to explore the impact that older people can have in an educational setting and, examine the mutual effect this has in developing and promoting intergenerational understanding. This action-research study elicited the views and experiences of children, older mentors and teachers involved in an intergenerational mentoring scheme.

The study reveals that there have been significant personal and educational gains for the children, older mentors and teachers involved in the scheme. Evidence suggests that the mentors have become a wise advisor, friend and teacher to identified individuals and groups of children in the class setting.

This unique UK study concludes that this evaluation should act as a base-line towards some extended research into the sustainability of older mentors working in schools, and the humanising effect this has at whole-school level in terms of improving intergenerational perception, understanding and cooperation.

MEETING THE NEEDS OF AN AGING SOCIETY THROUGH HOLISTIC UNDERSTANDING: DEVELOPING AND IMPLEMENTING AN INTERDISCIPLINARY GRADUATE PROGRAM IN GERONTOLOGY.

J.R. Sasser-Coen & M.E. Olszewski, Master of Arts in Interdisciplinary Studies Program, Marylhurst College, P.O. Box 261, Marylhurst, Oregon 97036-0261.

The purpose of our presentation is to discuss the development and implementation of a new Gerontology Program as part of the Master of Arts in Interdisciplinary Studies program at Marylhurst College. Marylhurst is a private, liberal arts institution that is committed to addressing the critical issues of humankind; certainly, one of the most perennial issues is human aging. In addition, we recognize that adult development and aging are complex, dynamic processes—bio-psycho-social phenomena that unfold within multi-layered socio-cultural and historical contexts; thus the experience and meaning of aging is ever-evolving and multiple. As such, Gerontology at Marylhurst is predicated upon a holistic approach to adult development and aging, integrating mind-body-spirit and recognizing the complex and rich contexts in which individuals travel through the life course. By intent and design, our program combines rigorous interdisciplinary scholarship with the opportunity for exploring and conceptualizing adult development and aging in new ways. This unique curricula is comprised of 24 credit hours --7 core seminars and 1 applied internship—and is consistent with AGHE standards. Students may pursue a Graduate Certificate in Gerontology or a MAIS degree with a Concentration in Gerontology. Upon successful completion of the program our students will be prepared to integrate a broad base of Gerontological knowledge into both their personal lives, and their primary scholarly and professional activities.

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ALZHEIMER REHABILITATION: 3 RELATED VIDEOS
(1) Volunteers in Partnership: A Rehabilitation Program for Alzheimer's Patients. 1 hour color video, #T-26 (1995) of Telerounds series, produced by the National Center for Neurogenic Communication Disorders of the U. of AZ. Features Sharon Arkin's student-administered program of memory & language training and "partnered volunteering."
(2) Alzheimer's and Exercise. 6 min. Arizona Illustrated (KUAT-TV) feature on the exercise aspect of Arkin's U. of AZ NIA-funded AD Rehab by Students program. Produced by Pam White, 1/5/98.
(3) Video Therapy with Alzheimer's Patients. 21 min. Produced by Sharon Arkin via Channel 10, Ft. Wayne, Indiana, 1992. Demonstrates use of home video equipment to produce therapeutic videos. Contact: Sharon Arkin, PsyD, U of AZ, Dept. of Speech & Hearing Sciences,Tucson, AZ 85721 sarkin@u.arizona.edu (520)760-5595

Recognizing and Responding to Emotion in Persons with Dementia

One (22 minute)/color videotape/1998
Produced by the Philadelphia Geriatric Center

In persons with dementia, non-verbal expressions are an important part of communication. Learning how to recognize and understand these expressions is a crucial part of providing care for these persons.

Building on a decade or more of work by some of the best behavioral researchers in the aging field, this video clearly describes five key emotions, (Anxiety, Anger, Sadness, Interest, Pleasure) that professionals and family caregivers can recognize, and suggests how caregivers might alter their direct care interactions in order to promote positive emotions and eliminate or reduce negative ones.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

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NUTRITION

Robert Arking, Wayne State University, *Introductory Comments*

Edward J. Masoro, Charleston, SC, *Biology of Dietary Restriction*

Susan Roberts, Tufts University, *Energy Regulation and Aging in Humans*

Barbara J. Rolls, Pennsylvania State Univ, *Changes in Intake Regulation in the Elderly*

George Roth, GRC, NIA, *Dietary Restriction in Primates, Including Humans*

It is well-known that nutrition has broad effects, both beneficial and deleterious, on aging. Dietary restriction is a classic aging intervention in animal model systems. Its use has been well documented to both reduce the incidence of chronic disease processes and lead to large increases in both mean and maximum lifespans. The goal of the symposium is to provide a global overview of our present view of nutritional effects on aging and to explore whether dietary restriction might serve as a model for potential aging interventions in humans. This is not to assume that DR itself would be an operative intervention - not too many people are willing to cut their calories by 40% - but knowing whether the DR mechanism is operative in people would provide a basis for the development of behavioral, pharmaceutical and other anti-aging interventions. The first talk will give a summary of DR effects and mechanisms in rodent and non-primate species. The second talk will give a summary of the evidence supporting the metabolic and other changes which contribute to the weight problems characteristic of older people. The third talk will review the physiological, psychological and/or social factors which affect the dietary choices people make and which may contribute in some way to the interaction of diet and longevity. The last talk will summarize the evidence supporting the presence or absence of DR effects and mechanisms in primate species including humans.

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PRESIDENTIAL SYMPOSIUM: IMPLICATIONS OF THE CHANGING HEALTHCARE SYSTEM FOR OLDER ADULTS

Organizer: Laurence Rubenstein, MD (UCLA-VA GRECC, Sepulveda VAMC, Los Angeles, CA 91343)
Presenters: Marilyn Moon, PhD (Urban Institute, Washington, DC 20037) Medicare Changes: Implications for the Delivery of Care.
Chad Boult, MD (University of Minnesota School of Medicine, Minneapolis, MN 55414) Emerging Systems of Care for Older Persons.
Richard Besdine, MD (Center on Aging, University of Connecticut School of Medicine, Farmington, CT 06030) Quality of Care in the Changing Healthcare System.
Robert Kane, MD (University of Minnesota School of Public Health, Minneapolis, MN 55455) Long Term Care and the Changing Healthcare System.

Our healthcare system (or rather collection of semi-organized systems) has been rapidly changing over in the past three decades since passage of Medicare, and it continues to change. The older population has ridden a roller coaster as policies, agencies, providers, reimbursement schemes, and ultimately quality of care have undergone tremendous shifts and tumults. The era of managed care is upon us and present many challenges as well as opportunities. In this symposium, experts from the arenas of policy, academics and clinical practice give their perspectives on where we have come from, where we are, and where we might be going in terms of healthcare for older adults. Featured experts will discuss changes in Medicare, new systems of care delivery, quality of care issues, and long term care implications.

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President's Symposium: Cultural Competence and Medical Pluralism

Moderator: Risa Lavizzo-Mourey, M.D., M.B.A., Chief, Division of Geriatrics and Director, Institute on Aging, University of Pennsylvania Health System

Presenters:

Linda Burhansstipanov, MSPH, DrPH, Director, Native American Program of Excellence, AMC Cancer Research Center *(invited)*

David Hufford, Ph.D., Professor, Behavioral Sciences, Hershey Medical Center and Director, Center for Humanistic Medicine at Penn State, Adjunct Professor, University of Pennsylvania

Gwen Yeo, Ph.D., Director, Stanford Geriatric Education Center

Elizabeth R. Mackenzie, Ph.D., Research Assistant Professor, Division of Geriatrics, University of Pennsylvania Health System

Medical Pluralism is grounded in the philosophy that just as the U.S. is a culturally pluralistic society, there exist many medical traditions and health belief systems in addition to biomedicine. These other systems are sometimes seen as alternatives to biomedicine, or as complementary systems, and increasingly are being evaluated for possible integration into biomedicine. This symposium will explore contemporary medical pluralism, and the potential benefits of integration, versus maintaining separate but complementary systems. We will focus on the possible contributions of complementary and alternative medicine (CAM) and integrative medicine to the population of older adults, especially enhancing access to care by elders of color. Special attention will be given to the relationship among CAM, health belief systems, ethnomedicine and cultural competence, given the non-Western origins of most CAM modalities, and the widespread use of ethnically defined CAM systems by elders of color.

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Presidential Symposium: How the Shifting Climate in Higher Education is Affecting Gerontology

Chair. J. Hendricks, Dean, University Honors College, Oregon State University, Corvallis, OR.

Participants: Judith Ramaley, President, University of Vermont, Burlington, VT.
Roy G. Arnold, Provost and Executive Vice President, Oregon State University, Corvallis, OR.
Jennie Keith, Provost, Swarthmore College, Swarthmore, PA.

The winds of change are sweeping across academia in ways that cannot be ignored. But which way are they blowing? How will the effects be felt in institutions of higher education? For gerontologists to insure maximal relevance, and thereby viability of their centers, research and educational programs, additional intelligence is appropriate. Three high ranking university administrators will share their perspectives and insights on how they perceive the changes that will affect us all and how they balance the competing petitions for support on their campuses. Between them they represent urban and land grant experience, liberal arts colleges and Carnegie Category I institutions. Changes in federal priorities, state budget reductions and declining private support portend a rebalancing of institutional agenda. As they are faced with difficult decisions and a demand to integrate the creation and dissemination of knowledge, service to clients and constituencies, both narrowly and broadly defined what information is sought by central administration? As new challenges appear, new strategies and initiatives emerge to meet core missions; what should gerontologists know if they are to remain central to those same missions?

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DIETARY RESTRICTION, SIGNAL TRANSDUCTION, AND THE GENETICS OF AGING AND LONGEVITY: CONVERGENCE OF PARADIGMS

S.M. Jazwinski, Louisiana State University Medical Center, 1901 Perdido St., New Orleans, LA 70112; G.S. Roth, Gerontology Research Center, National Institute on Aging, 4940 Eastern Ave., Baltimore, MD 21224.

Participants:

S.M. Jazwinski (Louisiana State University Medical Center, New Orleans) Coordination of Metabolic Activity and Response to Stress in Yeast Longevity.

S. Hekimi (McGill University, Montreal, Canada H3A 1B1) Control of Metabolism, Physiological Rates, and Aging by the *C. elegans* Gene *clk-1*.

G. Ruvkun (Massachusetts General Hospital, Boston, MA 02114) Insulin Signaling in *C. elegans* Longevity.

T.E. Johnson (University of Colorado, Boulder, CO 80309) Gerontogene Mutants in *C. elegans* May Share Common Pathways with Dietary Restriction.

R. McCarter (University of Texas Health Science Center, San Antonio, TX 78284) Metabolic Aspects of Dietary Restriction.

M. Lane (Gerontology Research Center, Baltimore, MD 21224) Potential Metabolic Targets to Mimic Effects of Caloric Restriction.

N. Holbrook (Gerontology Research Center, Baltimore, MD 21224) Stress Signaling, Gene Expression, and Aging in Mammalian Systems.

J. Nelson (University of Texas Health Science Center, San Antonio, TX 78284) Enhanced Stress Resistance as a Common Pathway for Extended Lifespan: Evidence from the Food Restriction Model.

A number of genes involved in signal transduction have recently been shown to play roles in aging and longevity. Although most of this work has been conducted in invertebrates, certain parallels with mammalian aging have been proposed especially as related to the life span-extending effects of dietary restriction. This convergence stems from the implication of metabolic effects and stress resistance in both the invertebrate and mammalian models.

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OH NO, NOT A CANE! STEPPING CAREFULLY TOWARD SOLUTIONS TO FRAILTY.

R.M. Anson, John Hopkins University & Laboratory of Molecular Genetics, National Institute on Aging, 5600 Nathan Shock Dr., Baltimore, MD 21224-6825, & H.J. Moulton, Columbia University School of Public Health, Division of Sociomedical Sciences, 600 West 168th Street, 7th Floor, New York, NY 10032.

Participants:

J.P. Kirwan, (Noll Physiological Research Center, 105 Noll Laboratory, University Park, PA 16802). Effects of Physical Activity and Diet on Body Composition and Functional Ability.

M. Brown, (Division of Geriatrics and Gerontology, Physical Therapy, Washington University, St. Louis, MO 63108). Preventing Frailty with Physical Activity.

R.C. Atchley, (Scripps Gerontology Center, Miami University, Oxford, OH 45056). The Relationship Between Functional Impairments and Morale.

D.L. Yee, (National Asian Pacific Center on Aging, Seattle, WA 98101). Does Current Policy Tend to Blame the Victim?

Discussant:

A.M. Jette (Sargent College of Health and Rehabilitation Sciences, Boston University, 635 Commonwealth Avenue, Boston, MA 02215).

Physical frailty, the severe impairment of strength, mobility, balance and endurance, is a vast and complex issue encompassing the biological mechanisms which cause it, the medical interventions which alleviate it, the social factors which affect it and are affected by it, and the policy which addresses it. This symposium seeks to provide an interdisciplinary perspective on the influence of life-style habits, environment, and concepts of self on frailty. Speakers are being asked to address the influence of nutrition on body composition and ability; the interactions between depression, frailty and inactivity; how concepts of self affect frailty; and the extent to which the policies address frailty in promoting prevention and independence.

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Symposium: Using a Practice Improvement Cluster to Improve Pain Management in Elders

Lois Miller, Benedictine Institute for Long Term Care, 980 S. Main St., Mt. Angel, OR 97068, Mathy Mezey, John A. Hartford Institute for Geriatric Nursing, NYU, 82 Washington Square East, New York, NY 10003

Presenters:

Mathy Mezey, (Hartford Institute, NYU) The Practice Improvement Cluster Model for Changing Clinical Practice

Shan Cretin, (Institute for Health Care Improvement, Boston, MA) A Model for Collaborative Change

Lois Miller, (Benedictine Institute)The Oregon Practice Improvement Cluster: Focus on Pain Management

The Practice Improvement Cluster (PIC) is one of the practice initiatives of the John A. Hartford Institute for Geriatric Nursing to raise the standard of care to the nations's elders. The first PIC demonstration is located in Oregon where a consortia of nursing homes, home health agencies, and community-based nurse consultants from 6 geographic areas throughout Oregon are collaborating on practice change. The Oregon PIC is focusing on pain management strategies for elderly people living in a variety of settings.

This symposium will present the activities and results of the Oregon PIC's first year of operation. An overview of the PIC model, its goals and objectives will be presented. The process of making small frequent changes in practice and the process for collaborating and communicating results of changes among participants will be discussed. Practice changes made during the first year by participating agencies and individual RNs that focus on assessment, changing attitudes, expanded repertoire of interventions, education, and overcoming barriers will be reported.

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The Osteoporosis Revolution: Updates from the Laboratory and the Clinic

K Prestwood, Center on Aging, University of Connecticut Health Center, Farmington, CT 06030-5215.

Participants;

C.C. Pilbeam (Center on Aging, University of Connecticut Health Center, Farmington, CT) The Role of IL-1 in the Bone Loss of Estrogen Withdrawal.

K.M. Prestwood The Use of Low Dose Estrogen to Treat Osteoporosis in Older Women.

A.M. Kenny (Center on Aging, University of Connecticut Health Center, Farmington, CT) The Effect of Testosterone on Bone Metabolism, Muscle Strength and Prostate in Older Hypogonadal Men.

S. Bellantonio (Center on Aging, University of Connecticut Health Center, Farmington, CT) Use of Agents Affecting Bone Metabolism in Community-living Women with Recent Hip Fracture.

D.P. Kiel (Hebrew Rehab Center for Aged and Harvard Medical School, Boston, MA) Predicting Fractures Using Bone Mineral Density: A Prospective Study of Long-term Care Residents.

Discussant:

L.G. Raisz (Division of Endocrinology, University of Connecticut Health Center, Farmington, CT)

Osteoporosis is common in older women and men, however, we have little information on its effective treatment in older adults. New information regarding the pathogenesis of osteoporosis as well as identification of those at risk for developing osteoporosis in specific populations are available. An integrated approach, including laboratory and clinical research, is required to fully understand this heterogeneous disease and to optimize treatment in older adults. This symposium will provide an update on recent advances in basic and clinical osteoporosis research, including discussions regarding pathogenesis of osteoporosis, treatment considerations in older men and women, issues regarding prevalence of use of therapeutic agents in older women and risk factors for hip fracture in the long-term care environment.

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NON-MANDATED USE OF MDS AROUND THE WORLD: LESSONS FOR THE US

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Participants:

R. Bernabei (Cattedra di Geriatria, Università Cattolica, 00168 Rome, Italy) MDS training around the world: Short, medium or long training?

J. Hirdes (Dept. Of Health Studies and Gerontology, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada) Why Canadians have chosen the MDS

L. Wiersma (Het Zonnehuis Amstelveen, 12 1186 Amstelveen, The Netherlands) Do European nurses like MDS?

Naoki Ikegami (Dept. Of Health Policy and Management, Keio University, Tokyo, 160-852 Japan) MDS implementation in Japan

J.N. Du Pasquier (Me-Ti SA, Carouge, CH-1227 Switzerland) How MDS can become a screening instrument

B.E. Fries (Institute of Gerontology, University of Michigan, Ann Arbor, MI 48109-2007) Who cares the best? A possible analysis when you use the same instrument

Discussants:
L.Z. Rubenstein (UCLA-VA Medical Center, GRECC, Sepulveda, CA 91343)
Sue Nonemaker (HCFA, Baltimore, MD 21244-1850)

Since the 1990 mandated implementation of the Minimum Data Set (MDS) in the US, a segment of health care workers and policy experts have questioned this system of assessment. Criticisms have been addressed to the intrinsic difficulties in compiling the assessment, which raised doubts about its scientific use, as well as to the absence of important areas to be assessed. Even after publication of some very positive implementation results, assumptions by a segment of persons in the industry regarding the validity of the MDS did not seem to improve. The burden of the definition of MDS as an "administrative" instrument seems to have precluded the full acceptance of its validity as a new assessment system and as a scientific tool. In the meanwhile, a group of long term care experts from around the world gave birth in 1993 to a non profit corporation, interRAI, with the aim of diffusing MDS and its derivatives around the world as the common assessment instruments. MDS was chosen because of the performance characteristics of the system, which make it a central tool to help staff in designing and implementing a targeted, individualized care plan within a specific health care setting, the nursing home. MDS it is now used in various forms in sixteen countries and it has become, or is going to become, the official assessment instrument in three Canadian provinces, in the Spanish Catalan region, in Iceland, and in Israel. This has allowed interRAI extensive international comparisons and post-implementation analysis, which will be presented.

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RECIPROCITY IN THE ASSOCIATION BETWEEN DEPRESSION AND PHYSICAL FUNCTION: LONGITUDINAL DATA FROM THE NETHERLANDS

DJH Deeg & BWJH Penninx, Longitudinal Aging Study Amsterdam (LASA), Vrije Universiteit, De Boelelaan 1081C, 1081 HV Amsterdam, the Netherlands

Participants:

BWJH Penninx, DJH Deeg, JThM van Eijk, (Institute for Research in Extramural Medicine, Vrije Universiteit Amsterdam). Depressed mood and mortality in the elderly.

DJH Deeg, BWJH Penninx (Institute for Research in Extramural Medicine / LASA, Vrije Universiteit Amsterdam). Depressed mood and change in physical performance, limitations and activities.

GIJM Kempen, J Ormel, M Sullivan, E van Sonderen, (Northern Centre for Healthcare Research, University of Groningen). Physical function in low-functioning elderly: synchrony of change and the impact of depressive symptoms.

AW Braam, ATF Beekman, DJH Deeg, W van Tilburg, (Department of Psychiatry / LASA, Vrije Universiteit Amsterdam). Religiosity: its modifying effect on the physical function-depression association.

CPM Knipscheer, M Broese-van Groenou, G Leene, (Department of Sociology and Social Gerontology / LASA, Vrije Universiteit Amsterdam). Social environment: its modifying effect on the physical function-depression association.

Discussants: JM Guralnik (National Institute on Aging, Bethesda, MD 20892), BJ Gurland (Stroud Center for the Study of Quality of Life, New York, NY 10032).

Depressive symptoms and physical disability are often seen in combination in older persons. The direction of the link between depression and physical function, however, is hard to unravel. Depressive symptomatology may influence physical function, and physical disability may be a risk factor for depressive symptoms. In this symposium, longitudinal data collected in two cycles of two community-based studies among older people in the Netherlands (the Longitudinal Aging Study Amsterdam (LASA, N = 3,107) and the Groningen Longitudinal Aging Study (GLAS, N = 574)) will be used to illustrate the reciprocity in the association between depressive symptoms and physical function. Depressive symptomatology is measured using the Center for Epidemiologic Studies Depression (CES-D) scale. Various different indicators of physical function are used, including mortality, performance-based tests, self-reported physical limitations, and physical activity. Also, the role of religiosity and social environment as effect-modifiers of the association between depression and physical function is demonstrated.

DEPRESSED MOOD AND MORTALITY IN THE ELDERLY

BWJH Penninx, DJH Deeg, JThM van Eijk, LASA study, EMGO Institute, Vrije Universiteit, v.d. Boechorststraat 7, 1081 BT Amsterdam, The Netherlands.

The influence of depressed mood on mortality among older persons in the Netherlands was examined. Data are from 3,107 persons aged 55 to 85 years who took part in the Longitudinal Aging Study Amsterdam (LASA). Depressed mood was defined as exceeding the cut point of 16 on the Center for Epidemiologic Studies-Depression scale (CES-D). Mortality data were obtained during a follow-up of 4 years, on average. The mortality rate was 71.3 per 1,000 persons-years for the 448 persons with depressed mood, and 42.1 per 1,000 persons-years for the 2,608 non-depressed persons. After adjustment for age, sex, education, urbanization level, chronic diseases, disability, alcohol intake and smoking, the mortality risk associated with depressed mood was 1.48 (95% confidence interval (CI) 1.18-1.87). The adjusted mortality risk for major depression diagnosed according to DSM-IV criteria was a bit higher (OR=2.22, 95% CI 1.30-3.79). The mortality risk was similar for young-old and old-old persons, but sex differences were observed. The risk associated with depressed mood was stronger among men (OR=1.95, 95% CI 1.43-2.65) than among women (OR=1.11, 95% 0.78-1.58). These results show that among men, but not among women, depressed mood is associated with a general increased risk of death.

DEPRESSED MOOD AND CHANGE IN PHYSICAL PERFORMANCE, LIMITATIONS, AND ACTIVITY

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Three currently used measures -physical performance (PP), self-reported functional limitations (FL), and self-reported physical activity (PA)- have been shown to measure different aspects of physical ability, depending on personal factors such as personality and depression. This paper examines the association of changes in depressed mood with change in these 3 measures of physical ability. In the national, age- and sex stratified probability sample of the Longitudinal Aging Study Amsterdam (initial ages 55-85 years), data were collected in two cycles, three years apart. In face-to-face interviews self-reported data on FL, usual PA, and depressive symptoms (CES-D, cut-off >15) were collected. PP was measured by timed tests of putting on and taking off a cardigan, walking 6 m, and 5 chair stands. All three physical ability measures were scaled from 0 (good) to 3 (poor). Depression status was defined as 'no depression', 'incident depression', 'remittant depression', and 'chronic depression'. Complete data were available for 1794 initially non-depressed, and 246 initially depressed subjects. Generally, the non-depressed showed the best functional ability; the chronically depressed the poorest. For each measure of physical ability, significant decreases in physical function were seen in incident as compared to non-depressives. The decrease in PP with incident depressed mood was stronger in those with a chronic disease; for FL and PA disease status did not make a difference. Also, significant improvement in FL, but not in PA and PP, were seen in remittant as compared to chronic depressives. These longitudinal findings confirm that depressed mood has differential effects on measures of physical ability. PA and PP seem to be less responsive than FL to changes in depressed mood.

PHYSICAL FUNCTION IN LOW-FUNCTIONING ELDERLY: SYNCHRONY OF CHANGE AND THE IMPACT OF DEPRESSIVE SYMPTOMS

GIJM Kempen, J Ormel, M Sullivan, E van Sonderen
Northern Centre for Healthcare Research, University of Groningen, A. Deusinglaan 1, 9713 AV Groningen, The Netherlands.

This paper examines the association between changes in self-reported and changes in performance-based physical function, and the role of depressive symptomatology in this relationship among 574 low-functioning older persons. The data were collected in two waves in 1993 and 1995. Changes in self-reported function were only moderately associated with changes in performance-based physical function. The strength of this relationship was dependent on the level of depressive symptoms. For older persons with an increase in depressive symptoms, strongest associations were identified due to a substantial increase in both performance-based and self-reported levels of physical dysfunction. Changes in depressive symptoms were stronger related to changes in self-reported physical function than to changes in performance-based physical function. Both initial levels of performance-based function and depressive symptoms were predictive for subsequent increase of reported physical dysfunction. The results strongly suggest that successful treatment of depressive symptoms brings about a reduction of subsequent levels of physical function and that successful interventions which improve functional ability in older persons may decrease associated levels of depressive symptomatology.

RELIGIOSITY: ITS MODIFYING EFFECT ON THE PHYSICAL FUNCTION - DEPRESSION ASSOCIATION

AW Braam, ATF Beekman, DJH Deeg, W van Tilburg;
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There is growing evidence that religion is likely to be effective in protecting against late life depression, especially among elderly with poor physical health. Religiosity is generally seen as a multidimensional construct, in which behavioral and subjective dimensions are discerned. Findings with regard to the subjective dimension are conflicting. This may be due to a lack of accuracy within the concept of subjective religiosity. The present study focuses on two aspects of subjective religiosity: salience of religion and traditional beliefs. Questions are whether these aspects protect independently against emergence of late life depression, and whether they interact. Subjects are 2,145 older Dutch citizens, who participated in the first two cycles, with a three year interval, of the Longitudinal Aging Study Amsterdam. Data are available on functional limitations, depressive symptoms, salience of religion and traditional religious beliefs. The results show that the two measures of religiosity are not significantly associated with emergent depression. There is however a significant interaction. Subjects with traditional beliefs are at lower risk of depression when religion is reported to be salient. Subjects with traditional beliefs are at higher risk of depression when religion is not salient. These results are especially pronounced among subjects who suffer from functional limitations. A conclusion is that subjective religiosity is only adaptive to the consequences of physical decline, when its components (beliefs, motivations) are congruent with each other. This congruence may be of clinical value in estimating whether religious background enhances or protects against late life depression.

SOCIAL ENVIRONMENT: ITS MODIFYING EFFECT ON THE PHYSICAL FUNCTION-DEPRESSION ASSOCIATION

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Department of Sociology and Social Gerontology, Vrije Universiteit Amsterdam.

The impact of the environmental context on the association between functional status and depressed mood is examined. Based on Lawton's ecological model of , it is expected that the fit between environmental context and personal competence (= functional status) determines depressed mood. Two factors are expected to moderate this association: given a poor functional status, being efficacious in managing one's environment and taking an active stand in changing environmental presses, are expected to decrease depressed mood. To test these hypotheses, data are used from 2712 independently living older adults aged 55-85 in the Longitudinal Aging Study Amsterdam. Functional status was measured by 3 items on functional limitations, depressive symptoms were measured by the CES-D scale. LISREL analyses demonstrated that depressive symptoms increase with decreased functional status, in particular for those living in a demanding environment (= urbanized areas), for persons who are not efficacious towards their environment (indicated by not performing heavy housework, a low self-efficacy, and not feeling safe outside), and persons acting more passively towards their environment (indicated by receiving help in (I)ADL-tasks, having few contacts in the neighborhood and participating less in voluntary organizations). These findings demonstrate the small, yet significant impact of environmental factors on depressed mood, in interaction with functional status. In addition, they stress the intermediary role of efficacious and proactive behavior in dealing with poor functional status and environmental press.

PREDICTORS OF MEALTIME SUCCESS: A MODEL FOR NURSING HOME RESIDENTS WITH DEMENTIA

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As dementia progresses, the last ADL to be lost is the ability to self-feed. Since mealtimes are multi-dimensional and have meaning beyond the ingestion of nutrients, the explanation for mealtime success for nursing home residents needs to be investigated examining the context of meals and interactions with caregivers.

An observational study was conducted in a large, urban nursing home. Fifty-three residents and their CNA caregivers were observed during the breakfast meal using the Interaction Behavior Measure (IBM). All food was weighed. Additional data were collected from physical examination, the medical record, the environment, and measures of CNA Empathy and Power.

The model that predicted the greatest amount of variance in the amount of food eaten incorporated the interaction between the CNA and resident (IBM), the CNA's need for power, the resident's MMSE and GDS scores, and resident length of stay (R^2 = .50, p < .05, $F_{5,47}$ = 8.90). Factors that negatively influenced food eaten included: stroke ($F_{36,15}$ = 3.05, p = .002); tardive dyskinesia ($F_{4,46}$ = 1.45, p = .048); receiving an antipsychotic medication ($F_{8,43}$ = 1.1, p = .04). Factors that positively influenced intake included: resident smiling during meal ($F_{39,11}$ = 2.37, p = .013); and having the same CNA on consecutive days ($F_{36,15}$ = 1.87). Implications for policy and further research will be discussed.

INADEQUATE NUTRIENT INTAKE AMONG THE HOSPITALIZED ELDERLY

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Objective: to assess the adequacy of the nutritional care

Methods: 722 randomly selected non-terminal elderly admissions monitored with daily calorie counts and scheduled comprehensive assessments. Subjects without adequate risk exposure (<4 days) were dropped leaving 497 patients.

Results: 102 subjects (21%) maintained an average daily intake <50% of maintenance requirements, which was significantly less than that of the remaining subjects (669±323 vs. 1,629±407 Kcal/day, P=.0001). Although the two groups were comparable at admission (albumin 36.6±6.2 vs. 36.6±5.6 g/L; prealbumin 21.8±8.4 vs. 21.6±7.5 mg/dL; illness severity score 8.9±3.5 vs. 8.4±3.1; percentage weight lost prior year 4.6±5.3 vs. 4.0±4.9) and had the same LOS (13±14 vs. 11±9 days)[P>.500 for all], at discharge, the low nutrient intake subjects had lower serum albumins (29.1±6.7 vs. 33.2±6.1 g/L, P=0.001) and prealbumin (16.2±6.9 vs. 20.5±6.8 mg/dL, P=0.001) and higher mortality (12.0% vs. 2.8%, P=.001). Both groups experienced similar amounts of weight loss (3.5±6.7 vs. 2.6±5.6 Kg, P=0.224). Equal percentages provided oral supplements (16.7% vs. 16.1%) but consumption averaged only 82±73 vs. 134±122 cc/day (P=.294). Few from either group (20.1% vs. 8.6 %) received any type of (forced) nutrition support. Of those who did, the average amount provided per day was small (48.0±26.6 vs. 77.9±24.4 Kcal/day, P=.030). Subjects had marked day to day fluctuations in their nutrient intakes and were often ordered to have nothing by mouth but were rarely provided nutrition support.

Conclusions: The incidence of in-hospital nutritional deterioration is high and often unrecognized.

CHANGES IN NUTRITIONAL STATUS, AGE AND POST-OPERATIVE HEALTH OUTCOMES IN OLDER PERSON UNDERGOING ELECTIVE CABG

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This study examines the extent to which post-operative health outcomes vary as a function of change in nutritional status and age in older persons (OP) undergoing elective CABG. The study also systematically describes the nutritional status of OP over time. The sample consisted of 91 community-dwelling English-speaking persons, ≥ 65 years (mean 72.27± 4.85, 61 males) who had normal cognitive function and no active cancer. To control for stress and illness severity, only OP undergoing elective CABG were recruited. Data were collected at three time points: pre-op (t0), post-op day 4-5 (t2), and 4-6 weeks post-discharge (t2). Serum albumin and transferrin, and BMI were measured at t0, t1, t2. Physical health (PH) was measured by the Physical component summary (PCS) score of the SF-36 administered at t2. OP undergoing elective CABG report lower levels of PH at t2 compared to the general US population norms for same age group. The long-term change (t2-t0) in BMI explained 13.8% of the variance in PH at t2, p=.008. The more weight lost, the lower the PCS score, B=1.647, t=2.278, p=.025. No relationship existed between PH and t2-t0 change in albumin or transferrin and short-term change (t1-t0) in albumin, transferrin or BMI. Nutritional status did change significantly over time. For albumin and transferrin the pattern of change, u-shaped, corresponds to the phases of surgical stress. BMI decreased linearly between t0 and t2. Previous studies document the prevalence of poor nutritional status in hospitalized OP, but fail to describe the trajectory of nutritional status. This is the first prospective study to document a relationship between a measure of nutritional status and PH, and the change in nutritional status in older persons undergoing elective CABG.

ASSOCIATION OF SALIVARY FLOW WITH BITE FORCE.

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We have reported age-related decreases in salivary flow rates and in bite force in an age stratified community-based population. Other studies show salivary flow rates are influenced by mastication. In this report, we examine the relationship between salivary flow rates and bite force in the above population. Salivary flow rates for unstimulated whole (UW) and submandibular/sublingual (US) as well as citrate-stimulated parotid (SP) and submandibular/sublingual (SS) saliva were measured in 161 male and 176 female subjects. Bite force was assessed with a bilateral force transducer. Flow rates were transformed into square roots to normalize the data. Pearson correlation analyses indicated a significant positive correlation between bite force and UW (r=0.24, p<0.0001), SP (r=0.13, p<0.03), US (r=0.14, p<0.001) and SS (r=0.16, p<0.003). When adjusted for age, the partial correlations between salivary flow and bite force were still significant (UW: r=0.21, p<0.0001; SP:

r=0.012, p<0.03; US: r=0.12, p<0.03; SS: r=0.13, p<0.013). These results show that bite force is correlated with salivary flow rate and suggests that the age-related decrease in bite force contributes to the age-related decline in salivary flow. (NIH/NIDR DE10756)

High Pre-Radiation Parotid Flow Rates Are Not Protective For Radiotherapy-Induced Salivary Dysfunction in Persons Receiving Radiation Treatment For Head & Neck Cancers. J. Ship, A. Eisbruch, B. Henson, E. D'Hondt, Univ of Michigan School of Dentistry & Dept of Radiation-Oncology, Ann Arbor, MI 48109

It has been suggested that high pre-radiation (RT) salivary flow rates are protective against RT-induced salivary dysfunction in head & neck cancer pts. However, this has never been shown in a long term study before and after the completion of RT. This study's purpose was to determine if high pre-RT flow rates are protective against RT-induced salivary dysfunction in pts receiving RT for head & neck cancers. Unstim (UPFR) and stim (SPFR) parotid flow rates were collected from bilat parotid glands before RT and 1 yr post-RT in pts from 2 parotid-sparing protocols where contralateral parotid glands were spared RT dosages. Pts receiving unilateral neck RT (ipsilateral pts) received lower RT dosages (n=24, $\bar{x}$ dose=3.8 Gy) to spared glands compared to pts receiving bilateral neck RT (bilateral pts; n=25, $\bar{x}$ dose =21.3 Gy), while treated gland RT dosages were similar. Ipsilateral pts with the highest quartile pre-RT UPFR and SPFR from spared glands had similar UPFR and SPFR at 1 yr post-RT compared to ipsilateral pts with the lowest quartile pre-RT UPFR and SPFR. Similar patterns were observed for the bilateral pts. However, higher RT dosages to spared glands were associated with significantly lower flow rates at 1 yr post-RT. These data suggest that high pre-RT parotid flow rates are not protective against salivary dysfunction 1 yr post-RT, while high RT dosages may be more likely associated with post-RT salivary dysfunction.

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THE RELATIONSHIP OF BLOOD PRESSURE TO SURVIVAL IN THE VERY OLD. S. Satish, D.H. Freeman, L.A. Ray, J.S. Goodwin, Center on Aging and Departments of Internal Medicine and Preventive Medicine and Community Health, UTMB, Galveston, TX 77555.

There are reports of increased survival at higher blood pressure among over 85 population. The purpose of this study is to explore the relationship between blood pressure and 3 year mortality among the very old (≥80 years). This study uses data from the NIA sponsored EPESE, a population based survey of older persons. Data used in this analysis include baseline data collected between 1981-83, and three annual follow-ups (n=9765). Logistic regression analyses show significant interaction between age and systolic blood pressure for all-cause mortality among both sexes. Minimum probability of dying after adjusting for comorbidity and frailty in the subjects ≥80 years was at a SBP of 178 mm of Hg compared to 145 in younger group (p<.01). Similarly, minimum probability of dying associated with systolic blood pressures among older females was significantly higher than younger females (155 vs 96 mm of Hg) (p<.001). In conclusion, blood pressure has differential impact on mortality in the old old compared to young old.

FACTORS ASSOCIATED WITH ACQUIRED DEPENDENCY IN A COHORT OF LIFE CARE COMMUNITY RESIDENTS. Busby-Whitehead J, Giuliani CA, Rosemond C, Robinson P. Institute on Aging, UNC-Chapel Hill, Chapel Hill, NC 25799

The purpose of this project was to identify factors related to functional decline and dependency in older adults. In a two year longitudinal study we measured functional performance and self report of ADL and IADL scales in a cohort of life care residents who were living independently at the initial measurement. From these 143 residents (113 female, 38 male) we obtained values for the Folstein (MMSE), Geriatric Depression Scale (GDS), Physical Performance Test (PPT), William's Timed Manual Performance (TMP), Reaction time (RT), ADL, IADL, and number of medications. At two years follow up 23 residents had developed new dependencies in ADL (n=14) or died (n=9). Comparisons between the groups (independent IND and dependent DEP) revealed significant differences (p<.05) in initial baseline measures for age, TMP, PPT, GDS, IADL, # Meds, and MMSE. ADL at baseline measure did not differ between the groups.

	Age	TMP	PPT	GDS	ADL	IADL	RT (ms)
IND	78.2	8.2	21.7*	5.2	11.9	3.5*	361
DEP	82.6*	10.3*	17.1	8.0*	11.7	2.1	427*

These initial analyses suggest that performance measures may be good indicators for impending onset of dependency. Continued analysis and causal modeling is needed to identify factors that can identify those elders who are at greatest risk for acquiring dependence. Ongoing research will focus on developing targeted intervention to delay dependency.

PREDICTORS OF FUNCTIONAL HEALTH IN YOUNG OLD, OLD-OLD AND CENTENARIANS.
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P. Martin, University of Heidelberg
L. W. Poon, University of Georgia Gerontology Center
M. Nichols, Medical College of Georgia

As the number of persons surviving to the age categorized as oldest old increases, there is growing concern regarding the functional ability of these individuals to live independently with a desirable quality of life. This study examined the group differences in selected physical health impairments (vision, hearing, and mobility) and indicators of functional health (Instrumental Activities of Daily Living, Physical Activities of Daily living, and self-assessment of health-limiting activities) for community-dwelling elders in their 60s, 80s and 100s.

The ability of the physical health impairments to predict functional health for each age group was examined using regression analysis. Although centenarians in this study were still living independently or semi-independently, they had significantly worse vision, greater difficulty with mobility, and lower levels of functional health than the younger age groups. Different predictors were found for functional health for different age groups. Mobility was the critical predictor of functional health for the 60s age group while both mobility and vision were important for centenarians. Only self-assessed hearing was a significant predictor of functional health for the 80s age group and then only for Instrumental Activities of Daily Living. This analysis indicates the crucial importance of mobility and vision to functional health and illustrates that significant differences in predictors of functional health exist among community dwelling oldest old adults.

DIZZINESS IN THE ELDERLY IS A MARKER FOR FUNCTIONAL IMPAIRMENT. RESULTS FROM THE CARDIOVASCULAR HEALTH STUDY C. Hirsch, R. Azari, H. Anton-Culver, J.Polak, J. Thompson, Div. of General Medicine, UC Davis Medical Center, Sacramento, CA 95817

Among older persons, dizziness is a frequent, troublesome, and often vague complaint. The epidemiology of dizziness could provide insight into its clinical significance and proper management in the elderly.

We analyzed baseline data from the Cardiovascular Health Study (CHS), a longitudinal, population-based study of risk factors for coronary heart disease and stroke in 5201 persons aged 65 and older. Extensive data were collected on assessed as well as reported prevalent disease, physical functioning, and psychosocial characteristics. Subjects were asked if, in the past year, they had had spinning or vertigo, loss of balance (LOB), or dizziness/lightheadedness upon standing quickly (postural lightheadedness [PD]). Logistic regressions were used to determine the independent correlates of each dizziness type. Among CHS participants, 42% reported at least 1 type of dizziness, with 24%, 13%, and 4% having 1, 2, and 3 types, respectively. Younger age and female gender were associated with vertigo (p<.01) but not LOB or PD. Difficulty walking and higher scores on the CES-D depression scale correlated with all 3 dizziness types (p=.0001). The odds of difficulty walking increased from 2.3 with 1 dizziness type to 7.4 with all 3 forms (p=.0001), while the odds of frequent falls rose from 3.4 to 4.7 for 1 and 3 dizziness types, respectively (p=.0001). Dizziness is an important clinical marker for impaired mobility, falling, and depression in the elderly.

TASK INDEPENDENCE, SAFETY, AND ADEQUACY IN COMMUNITY-DWELLING WELL AND IMPAIRED ELDERLY WOMEN. J. C. Rogers (U. of Pittsburgh, WPIC, 3811 O'Hara, Pittsburgh, PA 15213), M. B. Holm, (College Misericordia), S. Beach, R. Schulz (U. of Pittsburgh).

Independence in task performance is often interpreted to mean that a person accomplishes a task without assistance, and that performance is (a) safe, and (b) adequate. We examined data on the functional mobility (FM), personal care (ADL) and instrumental ADL (IADL) of a nondisabled well-elderly sample of women (WELL, n=57, mean age=78.7) and a disabled sample of older women with osteoarthritis (OA, n=56, mean age=56). Task performance was rated using the Performance Assessment of Self-Care Skills (PASS), a 26-item observational tool (FM=5 items, ADL=3 items, IADL=18 items). Ratings indicated that of those participants who were totally independent, not all demonstrated totally safe or totally adequate performance. Mean percentages of participants who were totally independent, and whose performance was also totally safe or adequate for FM, ADL, and IADL items is reflected in the table.

	%Totally Independent	%Totally Safe	%Totally Adequate
FM			
WELL	92.9	88.7	88.7
OA	83.9	77.5	66.7
ADL			
WELL	89.4	87.3	85.9
OA	75.0	73.8	65.4
IADL			
WELL	84.6	88.8	81.6
OA	74.8	72.0	69.0

ANOVAs revealed significant main effects for group, F(1,111) = 15.73 for FM; F(1,111) = 7.69 for ADL; F(1,111) = 8.09 for IADL; all p<.01. We concluded that the constructs of independence, safety, and adequacy of task performance, while related, are also distinct. These findings contribute to the research on preclinical markers of disability.

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MEASUREMENT OF MAXIMAL OXYGEN CONSUMPTION (VO_2MAX) IN OLDER, OBESE WOMEN N.Misquita, L.Tretter, D.Davis, A.Ryan, K.Dennis, B.Nicklas, Div. of Gerontology, Dept. of Medicine, Univ. of Maryland, Baltimore, MD 21201.

A total of 69 older (61±5 yrs), obese (body mass index=32±5 kg/m^2), sedentary (18.6±3.3 ml/kg/min) women underwent two graded treadmill tests to determine the validity of using standard criteria for the measurement of VO_2max in this population. On their 1st test, 62% of the women reached age-predicted maximal heart rate (HRmax), 51% reached a respiratory quotient (RQ) of ≥1.1, and 20% reached a plateau in VO_2 (change<150 ml/min) with an increase in workload. Thirty-one (45%) of the women achieved a true VO_2max (at least 2 of the 3 criteria). On the 2nd test, 67% of the women reached HRmax, 61% reached an RQ of ≥1.1, 36% reached a plateau in VO_2, and 46 or 67% achieved a true VO_2max. VO_2max was accurately measured in 24 women on both tests, while 22 women and 7 women only achieved VO_2max on the first and second tests respectively. Thus, after two tests, VO_2max was accurately measured in 53 (77%) of the women. Women who did not reach a VO_2max on either test (n=16) were of a similar body composition, but were older (63±6 vs 60±5, P<0.05) than women who did achieve a VO_2max on one of the two tests. These results suggest that at least two tests are necessary to measure VO_2max using standard measurement criteria in sedentary, obese older women.

Relationships Among Self-Reported Exercise, Body Composition, Blood Lipids, and VO_{2MAX}, in 60-to-70 Year-Old Men and Women. F.P.,Flatten, N.L. Rogers, W.W. Spirduso, R. Menzies. Departmentt of Kinesiology & Health Education, The University of Texas at Austin, Austin, TX 78712, and E. Heinze, St. David's Hospital, Austin, TX 78705

Participants (N=120, M=65±3 yrs) were compared for differences in and relationships between self-reported activity patterns, body composition, blood lipid concentrations, and predicted VO_{2max}. We hypothesized that older adults would display similar relationships between these variables as described in younger populations. Participants were free of overt disease and had a BMI<30. VO_{2max} was assessed by a graded exercise stress test. Percent body fat (Fat) and fat free mass (FFM) were predicted from the sum of 3 skinfolds. Males (M) had significantly (*$p<.05$, **$p<.01$) less Fat and more FFM than females (F). Only M displayed significant relationships between FAT and blood lipids (cholesterol: r=.31*; triglycerides: r=.41**; HDL: -.40**; and LDL, r=.26*). M Fat increased with age (r=.26*) while FFM tended to decrease (r=-.23, $p<.07$). Maximal heart rate (HRm) did not differ between sexes but M VO_{2max} was significantly higher than F. The self-reported exercise variables did not significantly correlate with body composition or blood lipids in M or F. VO_{2max} was significantly correlated to MIWK in M (r=.55**) and to intensity (INT) in both M (r=-.59**) and F (r=-.73**). M VO_{2max} declined 25%/decade (r=-.47**) and F VO_{2max} declined 13%/decade (r=-.32*) though HRm did not change with age. In conclusion, M displayed some associations between the assessed variables while the F did not. Menopausal changes as well as differences in activity levels may account for the different relationships among M and F. Comparison of z scores revealed great similarities between our sample and NHANES II data.

	n	Fat (%)	FFM (kg)	CHOL (mg/dl)	HDL (mg/dl)	VO2max (ml/kg/min)	INT (min/mile)	MIWK (miles/week)
M	60	26±6	60±8	211±40	44±14	39±6	14±3	10±9
F	60	34±7	42±4	225±34	63±18	29±5	16±3	7±5
		**	**	*	**	**	**	**

* Funding fby St. David's Healthcare Foundation, Austin, TX 78705

SIMULATED ENVIRONMENT AND AGING TRIAL (SEAT)

Julie Richardson, Research Director and Assistant Clinical Professor,[1,2] Mary Law, Associate Professor,[2] Laurie Swanson, Assistant Professor,[2] Gord Guyatt, Professor.[3]

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The maintenance of functional skills are essential if older adults are to live independently in the community. Recently the use of simulated environments have been advocated for rehabilitation. **Objective:** The purpose of this study was to determine the effectiveness of therapy delivered to relearn functional activities delivered in two different environments. **Method:** A randomised controlled trial was used to compare therapy delivered within a traditional gymnasium setting with therapy given in a contextually appropriate simulated environment of Easy Street®. Eighty-eight patients from a Day Hospital setting were assessed using a primary outcome measure the Structured Assessment of Instrumental Living Skills (SAILS) and secondary measures the Short Form-36 (SF-36) and the Canadian Occupational Performance Measure (COPM). Measurements were taken at baseline, after 4 months of treatment and 2 months following completion of treatment. **Results:** There was a significant difference between the groups on the SAILS F=4.42 (p=0.04) but not on the other outcomes. The group in the traditional environment performed better than the group trained in the simulated environment. **Conclusion:** The implications of using environments for retraining older adults in functional skill will be discussed.

EFFICACY EXPECTATIONS AND EXERCISE BEHAVIOR IN OLDER ADULTS A PATH ANALYSIS

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This study tested the hypothesized model that gender and mental and physical health impact efficacy expectations (self-efficacy and outcome expectations), and these factors, in addition to age and efficacy expectations predict exercise behavior. The sample included 187 older adults living in a continuing care retirement community. A face-to-face interview was conducted which included information related to exercise behavior, two measures of efficacy expectations and a measure of health (SF-12). The mean age of the participants was 85 ± 6 2, and the majority were white (n=184, 98%), female (n=155, 83%), and unmarried (n=153, 83%). The hypothesized model fit the data ($X^2=1.16$, p= 28;GFI=99, AGFI= 95). Ten of the 14 hypothesized paths were significant, and the model accounted for 50% of the variance in self-efficacy expectations, 30% of the variance in outcome expectations, and 11% of the variance in exercise behavior. Only physical and mental health (not age or gender) significantly predicted self-efficacy expectations. Age, gender, and physical health significantly predicted outcome expectations. Younger males with better perceived physical health had stronger outcome expectations related to exercise. Health status and efficacy beliefs directly, and indirectly influenced exercise behavior. Age and gender had an indirect effect on exercise via outcome expectations, and outcome expectations were better predictors of exercise than self-efficacy expectations. Interventions to strengthen outcome expectations may be useful to improve exercise behavior, particularly in older women. Continued research is needed to test this model with other samples, test the reciprocal relationships between variables, and to consider additional variables that might influence exercise behavior

ENERGY REQUIREMENTS OF MIDDLE-AGED MEN ARE MODIFIABLE BY PHYSICAL ACTIVITY

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Aging is associated with a decline in energy requirements that is not typically matched by a reduction in energy intake, which results in weight gain. This study examines the contribution of regular physical activity to the total daily energy requirements of healthy, sedentary middle-aged men. We hypothesized that the energy requirements for weight maintenance would increase after aerobic exercise (AEX) or AEX and weight loss (AEX+WL) in sedentary men to levels comparable to those of middle-aged athletes.

Weight maintenance energy requirements (±0.25 kg) were studied in 14 lean sedentary (LS), 18 obese sedentary (OS) and 10 male athletes (A) at baseline and after 6 mos of AEX in the LS or AEX+WL in OS men, and 3 mos deconditioning in athletes. The interventions increased VO_2max by 15% in LS and by 13% in OS, and decreased it by 14% in A, eliminating differences among the groups. Energy requirements increased by 8% in LS and by 5% in OS, and decreased by 16% in A. The average daily energy requirements of the trained men became comparable to the baseline requirements

of A, and correlated with VO_2max and FFM across the range of VO_2max in all subjects. Thus, under free-living conditions AEX eliminates the difference in weight maintenance energy requirements between middle-aged sedentary and athletic men. This suggests that weight maintenance energy requirements of healthy, sedentary middle-aged men are modifiable by regular physical activity. This may prevent weight gain and the development of obesity with aging.

CHALLENGES TO AN EXERCISE INTERVENTION: AN ANALYSIS OF DROPOUTS J.Schmidt, L.Wolfson, C.Gruman. University of Connecticut Health Center, Farmington, CT 06030-6144.

In recent years, it has become accepted that exercise is a key element in improving or maintaining physical well-being in older adults. However, compliance and drop out present major obstacles in an exercise intervention. The purpose of this study was to measure and quantify the reasons for drop out, and compare the baseline characteristics of subjects completing an intervention trial versus those who dropped out.

The NIA-funded study involved 155 community-dwelling men and women recruited for a center-based intervention study, who were 77.4 ± 4.5 years old, with impaired physical performance (SPPB $\leq$9), assistance in $\leq$1 ADL and MMSE $\leq$24. After 3 sessions of baseline assessments, subjects were randomized into one of two groups: group exercise (n=80) or self-paced walking (n=75). Between randomization and study completion, 54 subjects (35%) dropped out for such reasons as: medical condition, time commitment, group assignment or refusal to participate further. Dropouts were significantly less healthy (CIRS $p = .001$); perceived their physical health to be worse (SF36, $p=.04$); mobility was impaired on the following dimensions: difficulty walking ¼ mile (NAGI, $p = .007$), slower gait speeds at normal and fast pace ($p=.01$), and less endurance for a 6 minute walk test ($p = .01$). Analysis on medical dropouts (18%) and non-medical dropouts (17%) showed that medical dropouts were significantly different from retained subjects in the above key variables, except 6 minute walk endurance.

This paper describes which elements of attrition researchers can attempt to control. It suggests a need for increased power in studies with frail elderly to lessen the effect of a high drop out rate due to medical conditions, while non-medical dropouts may be controlled by better attention to detail in screening (i.e. focusing on social/family obligations or a longer run-in period).

COMORBIDITIES, AND THE ENTRY OF OLDER PATIENTS WITH PERIPHERAL ARTERIAL DISEASE INTO AN AEROBIC EXERCISE PROGRAM. S Taylor, J Sorkin, S Engelhardt, AR Yataco, C Powell, D Bradham, A Gardner, LI Katzel. Department of Medicine, Division of Gerontology, University of Maryland and Baltimore VAMC GRECC, Baltimore, MD

Exercise training has been advocated to improve function in patients with peripheral arterial disease (PAD). Older patients with PAD often have comorbid medical problems that may interfere with their ability to safely exercise train. The purpose of this study was to identify comorbidities that predicted exclusion from participation in an exercise clinical trial. Two hundred twenty five consecutive older (69 ± 8 yrs, mean ± SD) outpatients with PAD underwent a history and physical exam, blood chemistries, measurement of ankle to brachial index, (ABI) and an exercise treadmill test. Seventy-nine (35%) were medically ineligible, 22 due to coronary disease (CAD), 8 with severe PAD, the rest for various diseases. In stepwise logistic regression analyses, low ABI, and use of insulin predicted exclusion, whereas revascularization was associated with inclusion. Indeed, 24 of 27 revascularized patients qualified for the study. A history of CAD, CABG, and HTN were not determinants of eligibility. Thus severely disabled PAD patients with insulin-requiring diabetes and low ABI were more likely to be excluded. Whether intensive medical therapy and revascularization will allow them to exercise train remains to be determined.

RELATIONSHIP BETWEEN LOWER EXTREMITY STRENGTH AND CHAIR STAND TIME H.R. Scott-Okafor, K. Silver, J. Parker, T. Almy-Albert, A.W. Gardner, Div. of Gerontology, Claude Pepper Center, U. of Maryland, and GRECC, Baltimore VAMC, Baltimore, MD 21201.

The purpose of this study was to determine if chair stand time accurately assesses lower extremity strength in older patients with peripheral arterial occlusive disease. We recruited twenty-five patients (3 females, 22 males; 14 Caucasians, 11 African Americans). Mean age was 69.3 ± 6.4 years. Mean resting Ankle/ Brachial Index was 0.63 ± 0.21. Lower extremity strength was evaluated using isometric dynamometry in the muscle groups of the hip, knee, and ankle. Patients performed five timed chair stands. Mean dorsiflexion and plantar flexion torques were 258 ± 130 Newton-meters (Nm) and 527 ± 247 Nm, respectively. Mean chair stand time (13.72 ± 2.95 sec) was related to dorsiflexion ($r=-0.520$, $p<0.01$). There was not a strong relationship between chair stand time and plantar flexion ($r=0.27$, $p=0.189$). Hip flexion (203 ± 96 Nm), hip extension (295 ± 119 Nm), knee flexion (146 ± 55 Nm), and knee extension (330 ± 104 Nm) did not correlate with chair stand time. We conclude that more rapid completion of the chair stand test is associated with greater strength in the dorsiflexors.

Supported by NIA (P60AG12583 AND K01AG00657).

THE USE OF ANAEROBIC THRESHOLD AS A MEASURE OF CHANGE IN PHYSIOLOGICAL FUNCTION IN ELDERLY PATIENTS WITH OSTEOARTHRITIS OF THE KNEE A.N. Gloviak, K.K. Mangione, Department of Physical Therapy, Beaver College, Glenside, PA 19038.

Studies with elders show conflicting results regarding improvement in maximal oxygen consumption (VO_2) after exercise training. It is assumed that a lack of change in VO_2 max implies a lack of physiological benefits. Anaerobic threshold (AT), a submaximal measure of VO_2 obtained from a graded exercise test (GXT), may be a more appropriate measure of cardiopulmonary training effects for the elderly. The purposes of this study were to determine if AT increased after exercise intervention in a sample of elderly subjects with osteoarthritis (OA) of the knee and to determine if intensity of exercise affected the AT. Thirty-one elderly subjects (mean age 71 yrs) performed 25 minutes of stationary cycling, three times a week for ten weeks. Subjects were randomly assigned to a high or low intensity group. Breath by breath data were collected during treadmill GXT before and after the exercise intervention. AT was determined via the V-slope method and the modified V-slope method. Intra-rater reliability (ICC 3,1) was 0.98. No differences between methods were found.

Repeated measures of analysis of variance showed there was a significant increase in AT after exercise ($p < .05$) There were no significant differences between subjects who exercised at high and low intensity, and no interaction between group and time. The results of this study suggest anaerobic threshold, a submaximal measure, can be used to measure change in cardiopulmonary function in elders with knee OA.

DIFFICULTIES IN RECRUITING THE OLD OLD WITH OSTEOARTHRITIS FOR AN EXERCISE STUDY

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This report illustrates the difficulties in recruiting the frail elderly for a proposed 16 week combined aerobic and resistive training study on osteoarthritis (OA) patients aged 80 years and older. In June 1997, a chart review of 175 congregate housing tenants identified 27 potential candidates (medically stable OA patients). 12 were participants of an aerobic exercise program (exercisers) run by the research team. In September 1997, the candidates were contracted for a recruitment interview using a standardized questionnaire. Of the 27 potential candidates, 6 (1 exerciser) refused the interview, 1 moved, 2 died, 2 were disqualified with interim hospitalizations; hence only 16 subjects were interviewed. 8 declined the study as 6 (4 exercisers) were relatively asymptomatic regarding their OA and 2 were concerned about the safety of exercise training. 8 (6 exercisers) wanted to join the study as they thought the study would benefit their significant pain/limitations due to OA. In summary, only 30% of potential candidates identified by careful screening would join the study. Our findings suggest that the frail elderly would be more likely to participate in an intervention study if they perceive direct benefits from the study (chi-square 3.11, $p<0.1$) and if they are familiar with the intervention and the research team.

Physical Activity Programming for Low-Income Older Adults.

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Most low income older adults fail to meet the 1996 Surgeon General's Recommendations for physical activity (SGR). We hypothesized that a formal activity program in low income housing would increase the level of physical activity for all residents ≥60 years, not only program participants. Surveillance, at baseline (June) and 6 mo (Dec), included the activity level (PACE), physical function (SF36PF), barriers to exercise and demographics. Physical activity programing included resistance and endurance training. Respondents (age=77±8; baseline n=134; 6-mo n=97) were predominantly white, living alone, high school educated, moderately impaired (SF36PF=46) and inactive. 59% did not meet the SGR. At 6-mo. the proportion of those who did no physical activity was reduced from 33 to 21%; low (<SGR) physical activity increased from 26 to 56%. Holiday activities and weather reduced the number of active older adults (≥SGR) from 41 to 23%. Formal physical activity programming spills over to the greater community as increased activity, regardless of participation.

FEMORAL NECK BONE DENSITY AND PHYSICAL ACTIVITY IN OLDER ADULTS, PRELIMINARY RESULTS, NHANES III.

J.R. Fenster, D.B. Paturzo, S.T. Reisine, and K.M. Prestwood, University of Connecticut Health Center, Farmington, CT 06030.

Objectives: To investigate the relationship between levels of physical activity and femoral neck bone mineral density (FN BMD) in men (M) and women (W) 65 years of age and older. **Methods:** Unweighted data from the 1988-1994 National Health Interview Survey were utilized. M (n=1693, 75.0±6.8 years) and W (n= 1638, 75.2±6.7 years) who participated in the laboratory exam and completed an acceptable bone density test were included, unless they reported a previous hip fracture (n=164) or treatment for osteoporosis (n=212). Physical activity was stratified into 4 activity groups: 1) Weight-bearing activity (**WB** - i.e., walking), 2) Non weight-bearing activity (**NWB** - i.e., swimming), 3) gardening (**GD**), and 4) no activity (**NA**). **Results:** Weight-bearers were significantly younger and weighed less than other activity groups for both men and women ($p<0.05$, ANOVA). Adjusted FN BMD measurements, means and standard errors are listed in the following table.

	FN BMD (g/cm^2)				
	n	WB	NWB	GD	NA
M	1693	0.769* ± 0.005	0.761 ±0.012	0.760 ±0.006	0.747 ±0.007
F	1638	0.646 ± 0.004	0.644 ±0.010	0.647 ±0.006	0.643 +0.004

**p<0.001 compared to all other groups, controlling for weight and age.*

Male WB had significantly higher BMD than other activity groups. If estrogen users (n=92) were included in the sample for W, the results were similar. **Conclusions:** The data suggest that WB may be useful in maintaining bone health in men, while WB alone may not be sufficient for older women.

"Task-Oriented" Locomotion Training Improves Volitional Quadriceps Strength in Chronic Hemiparetic Subjects.

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Purpose: Decreased muscle strength and altered stretch reflexes contribute to functional impairment following ischemic stroke. We have reported previously on the cardiovascular benefits of aerobic training in chronic hemiparetic patients. In the present study we tested the hypothesis that 6 months of three times per week aerobic locomotion training would improve quadriceps strength both eccentrically and concentrically and decrease spastic reflexes. **Subjects:** Thirteen males and two females, aged 66.7 ± 8.13 (Mean ± S.D.) years, with mild to moderate gait deficits due to remote stroke (>6 months) were recruited for this study. Eligible subjects were treadmill trained using a modified cardiac rehabilitation protocol. **Methods:** Patients were tested at baseline and after 3 and 6 months of treadmill training using isokinetic dynamometry (Kin-Com AP 125™) at four angular velocities (30, 60, 90, and 120 deg/sec). Testing was conducted at each angular velocity in passive, concentric and eccentric modes using a modification of the technique described by Knutsson and Martensson. **Results:** Eccentric torque increased after 6 month of training by 39% ($p<0.05$) and 34% ($p<0.05$) in the paretic and non-paretic limbs, respectively. Concentric torque increase after 6 months by 46% ($p=0.07$) and 50% ($p<0.05$) in the paretic and non-paretic limbs, respectively. There were no changes in reflexive (passive) torque after 6 months training in either limb. **Conclusions:** These findings strongly suggest that a "task-oriented" locomotion training paradigm can improve volitional torque production in chronic hemiparetic subjects.

Exercise and Functional Recovery After Hospitalization

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Functional decline during hospitalization may continue after discharge and contribute to greater use of health care resources. Exercise may reduce or reverse this decline by improving muscle strength, ROM, balance and gait. To examine the effects of a 12 week muscle strengthing and ROM exercise program, 5 men and 1 woman were in the exercise group (M = 80 years) and 5 men and 2 women were in the control group (M = 78 years). Data were collected in the hospital (pretest) and 1, 2, 4, 8, and 12 weeks later. The percent of change from hospital to 12 weeks is reported. Muscle strength was measured by dynomometer, ROM by goniometer, and gait and balance by the Tinetti Mobility Assessment Scale. Muscle strength in the experimental group increased 202% for the knee extensors and 198% for knee flexors, while they declined 5% and 1%, respectively, in the control group. In the experimental group, ROM increased from 10% for ankle inversion to 75% for dorsal flexion, while the control group declined from 45% to 60%. Balance increased 550% in the experimental group while the increase was 100% in the control group. Gait increased 13% in the experimental group with little change in the control group. After hospitalization, a muscle strengthening and ROM exercise program may facilitate a faster return in muscle strength, ROM, postural stability, and gait than usual care.

NR04012

A STRUCTURED RESISTANCE TRAINING PROGRAM FOR ELDERLY PEOPLE WITH DEMENTIA

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Eight elderly persons with a diagnosis of dementia, Mini-Mental Status Exam scores of 20 or lower, attended and successfully completed a high intensity resistance training program held twice weekly for twelve weeks. Our goal was to improve performace on functional ability tests by increasing muscle strength and power with a high intensity resistance training program. In post-versus pre-training comparisons, muscle strength and power were increased for the hip abductor/adductor ($p<.01$), shoulder press ($p<.05$), leg extension/curl ($p<.01$) and chest/back ($p<.01$) exercises. However, there were no improvements in measures of functional ability including balance, timed chair stand, gait speed or timed stair climb. This study shows that it is feasible to engage elderly persons with dementia in a structured resistance training program, and that the program will result in increased muscle strength and power. Enhanced physical function ability using resistance training may require longer-term training, more frequent functional test practice and unique motivational techniques.

TOO OLD TO EXERCISE? SOCIAL CONTEXTS FOR SEDENTARY LIVING IN CANADA AND AUSTRALIA

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Increasingly, older adults are being exposed to information about the benefits of exercise in late life. Yet only a minority of older people are adequately active. Barriers to active living among older adults must be better understood if health professionals hope to develop effective strategies for social change. The objectives of this study were to: 1) identify and compare key life situational determinants of sedentary lifestyles among older adults in both Canada and Australia and 2) explore the inter-relationships of work-time physical activity (WTPA) and leisure-time physical activity (LTPA). Over 1,000 adults aged 50 to 96 completed identical cross-national surveys on work and leisure time physical activity. The Older Adult Exercise Status Inventory (OAESI) provided a 7-day kilocalorie estimate of the criterion variable. In addition, information was gathered on 10 social characteristics representing one's life situation (age, birthplace, health, education, marital status, family size, employment status, cultural background, financial status and previous activity) over the life course. A significant association was found between WTPA and LTPA ($r = .166$, $p < .000$) suggesting that people who are more active in their leisure choices tend to also be more active in their work patterns. In a backward step-wise regression analysis used to produce a reduced theoretical model, four significant predictors of sedentary behavior emerged: age ($p < .0001$); birthplace ($p < .01$); current health ($p < .000$), and sex ($p < .000$) explaining 7.5% of late life inactivity. These findings suggest that there are important disabling factors for active living related to being very old, being female, feeling unwell and being a recent immigrant. Apparently, cultural forces operate through an individual's social identity which may limit or create incentives for healthy levels of physical activity.

MEASURING ACCUMULATED HEALTH BENEFITS OF EXERCISE FOR OLDER ADULTS

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As adults age, somatic complaints--sleep, aches and pains, lethargy, constipation--become more common, and are treated pharmacologically. Such sypmtoms may be due to a sedentary lifestyle and can be improved over time through regular exercise. The 10-itemVitality Plus Scale (VPS) was developed for and with older adults to measure the accumulated benefits of exercise participation. Previously, it was necessary to use multiple measures which was frustrating for many older adults. The VPS has good temporal stability (ICC=.87), internal consistency (alpha=.83), discriminative abilities, convergent and discriminative properties (against the SEES and the SF-36), and is responsive to change with exercise. This scale takes less than 5 minutes to complete, is easy to score and is designed for practitioners and researchers as a standardized measure of incremental improvements previously documented only by retrospective testimonials.

EXERCISE ADOPTION AND MAINTENANCE IN CLASS-BASED PROGRAMS FOR OLDER MEN

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Previous research suggests that older men perceive class-based exercise programs to be "for women." We conducted a case-study of a self-formed, long-lasting class-based program comprised of 100 retired males. Focus group (12 men, mean age 70.3±5.9) and qualitative data analysis examined reasons for joining and adherence. Four themes emerged from the data: vulnerability, accomplishment, something purposeful to do, and social interaction. Participation in the class provided a sense of accomplishment and purpose for these men who described losses associated with retirement and ageing. Social interaction, described as, camaraderie and fellowship, was considered to be a primary reason for continued exercise participation, despite environmental and physical constraints. These findings are important to guide long-term adherence in this specific population.

EXERCISE BELIEFS OF OLDER ADULTS THAT LEAD TO SEDENTARY LIVING IN CANADA AND AUSTRALIA

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While most older people agree that exercise at every age is "good for you," only a minority are participating in physical activity at levels conducive to maintaining health. While both social context and cognitive beliefs are important determinants of activity level, belief systems are the most suited to remediation. The objective of this cross-national study was to identify and compare key cognitive determinants of sedentary lifestyles among older adults in both Canada and Australia. Over 1,000 adults aged 50 to 96 completed identical cross-national surveys on work (WTPA) and leisure time physical activity (LTPA). The Older Adult Exercise Status Inventory (OA-ESI) provided a 7-day kilocalorie estimate of the criterion variable. Eight self-referent beliefs about physical activity representing Social Cognitive Theory and related models were explored: past and present exercise efficacy, past and present social support, personal value held for physical activity, anticipated exertion, perceived enjoyment and perceived harm. Overall, Australians and women were less active in LTPA. Backward stepwise regression with listwise deletion showed that 13% of LTPA was explained by four cognitive beliefs: current judgements about personal efficacy ($p < .01$); perceived enjoyment ($p < .05$), anticipated exertion ($p < .004$), and childhood efficacy for vigorous play ($p < .001$). Less active people felt that: 1) they lacked confidence to participate stemming back to lack of physical skill in childhood, 2) they would not enjoy themselves; and, 3) they anticipated over-exertion in physical activity settings. The findings of this study suggest that community programmers should encourage older people to start moving with social activities that are very easy (unskilled) and self-paced, inherently enjoyable, and low-skilled such as walking and gentle stretching.

The role of physical activity in old patients in preventing self-sufficiency loss

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In old patients acute illnesses upset a functional state that is already in a precarious balance, reducing their ability to cope with daily problems. During the stay in hospital, that is needed to solve the acute process, the importance of functional state restoration and the maintenance of self-sufficiency are often underestimated.
The correct clinical approach to old people underlines the need of returning the olds their previous functional state, or in case this is not possible, of maintaining or minimizing the loss of their remaining function.
This is the reason why we decided to evaluate the impact of a rehabilitation program on restoration of functional state. The study was conducted in the Geriatric Division of I Clinica Medica, Policlinico Umberto I, University "La Sapienza", Rome.
The study of which we present preliminary data, included 123 patients over 65 (average age 78.5 years, range 65-96) that were hospitalized during 6 months running in the Geriatrics and Gerontology division of I Clinica Medica, Policlinico Umberto I, Rome. Patients underwent , from their first day of arrival in our division, a rehabilitation program. The program consisted in an individual program of physiotherapy, when needed, or in 20 minutes of walk, with a geriatric operator, on a measured path in the other cases. Physical function and self sufficiency were evaluated using Tinetti gait and balance scale and Barthel index both at admission in hospital and exit.
Average score of Barthel index at entrance was 84.2 (SD 25.9). At the end of the rehabilitation program we found average score of 85.4 (p=non statistically significant). We concluded that rehabilitation was able to prevent self-sufficiency loss during the period of hospitalization, as usually observed in clinical practice.
Tinetti gait and balance scale at entrance was 18.5 (on a maximum of 28) the first part of the scale, that examines gait, gave an average value of 8.5 (out of 12), the second part that evaluate balance, gave a average value of 10.1 (out of 16). After the rehabilitation individual therapy program was conducted, we observed an important improvement in the considered functions. The average level reached by patients for the Tinetti gait and balance scale was 21.5 (SD=7.7) at dimission, with a increase of 15.6%. This increase was statistically significant ($p < 0.005$). Analyzing the different sections of the scale we found, at the end of the stay in hospital, a medium value of 10.3 for gait and 11.6 for balance. We found an increase of 13.8% for gait and 16% for balance. Differences between admission and exit score of both

Tinetti gait scale and Tinetti balance scale were statistically significant ($p < 0.05$).

	Media and SD at admission	Media and SD at exit	p
Barthel index	84.2 (25.9)	84.4 (26.2)	0.723
Tinetti gait scale	8.5 (4.7)	10.2 (3.5)	0.008
Tinetti balance scale	10.0 (5.3)	11.6 (4.6)	0.021
Tinetti gait and balance scale	18.6 (9.5)	21.53 (7.7)	0.14

Data show the improvement of physical performance of our patients and the maintenance of self- sufficiency. This result helps the return to the social life of our old patients.

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OMBUDSMAN ROUNDS: TEACHING PRINCIPLES OF PALLIATIVE CARE AT THE BEDSIDE.

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One of the lessons from the SUPPORT Study was the importance of involving the entire care team, especially the attending physician, in end-of-life care and decision making. Yet health care professionals are often reluctant to confront these issues. As part of our United Hospital Fund sponsored Hospital Palliative Care Initiative, we have developed a monthly series of case conferences called Ombudsman Rounds. These rounds include highly respected and influential attending physicians, who, working with the Palliative Care attending and attorney/ethicist, offer advice about management of difficult problems in dying patients.

Ombudsman Rounds are held in four different locations: The Medical Intensive Care Unit, the AIDS unit, and two general medical wards. They are interdisciplinary, and include house staff, staff nurses, the palliative care nurse and counselor, and personnel from Patient Relations, as well. Case presentations always include a visit to the bedside; the patient is included in the discussion whenever possible. All case conferences are written up and presented to the hospital Ethics Committee for further comment.

These rounds have: 1) started to increase attending physician awareness of and respect for palliative care issues; 2) given rise to changes in hospital policies and practices; 3) increased the volume of consultations by the Palliative Care Program, 4) resulted in new patient care options; 5) increased house staff and nursing interest in the Palliative Care Initiative. Examples of these cases will be presented.

IS ETHICS TRAINING KEEPING UP: RESULTS OF A NATIONWIDE SURVEY

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Ethical dilemmas challenge physicians in areas of end-of-life care and use of costly technology. As medical education institutions strive to enhance their ethics curriculum, physicians feel inadequately prepared. A nationwide survey of 414 AAFP members provided data for analysis. Physicians were asked to respond to a variety of questions related to physician assisted suicide, ethics training, and health care rationing. Results showed that 80% of respondents feel that the Hippocratic Oath they took is relevant to their medical practice today, however, only 36% feel that the amount of formal ethics training they received is satisfactory. Being satisfied with their formal ethics training was inversely proportional to the years since graduation from medical school (p=.034). 72% of responding physicians described themselves as "somewhat, very, or extremely" religious. Their self-described religiosity was a significant factor related to feeling that the Hippocratic Oath is still relevant and that the traditional oath be given to all medical school graduates (p=.001 and .004).

Although family physicians feel that ethics training is very important, the amount of training that they received was insufficient. As medical schools and residency programs place increased emphasis on improving ethics curriculum, the question remains are they able to keep up quantitatively as well as qualitatively with preparing physicians to deal with the diverse moral challenges faced in an aging and technologically driven society.

EXTUBATED PATIENTS AND THEIR NEXT OF KIN OPT FOR FUTURE INTUBATION.

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Following extubation, patients & their next of kin were asked about the intubation experience, to rate it on a Likert scale & about their decision regarding future intubation. Results: 277 patient needed mechanical ventilation, 141 were extubated, 23 patients and their next of kin were interviewed. Mean age of patients was 65 yrs, 96% were males, 57% whites, 39% blacks and 4% Hispanics. Most common diagnoses were CHF and infections (each 74%), CAD (70%), COPD (57%), pneumonia (49%), cancer (17%) and sepsis (4%). 65% remembered their inability to breath & 78% remembered having an endotracheal tube. Intubation experience was rated as pleasant (5%), neutral (5%), moderately unpleasant (35%), most unpleasant (55%). 96% of patients and their next of kin opted for future intubation. Both groups concurred in their rating of the intubation experience, choice of future intubation. 96% were discharged alive, 91% to home, 4.5% to nursing home & only 4.5% died prior to discharge.

Conclusions: Patients, who have a successful initial extubation, & their next of kin have similar perceptions of the intubation experience. Both opted for future intubation despite the discomfort associated with intubation. Physicians educating patients about CPR and advance directives can use this and other experiential learning of patients and their next of kin during their discussions.

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WHAT PHYSICAL FACTORS ASSOCIATE WITH FRAILTY?

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One hundred and four older adults ($\bar{x}$=82y) were classified as fit (n=18), mildly frail (n=49) or moderately frail (n=37) according to a physical performance test (PPT) modified from Reuben and Siu (1990). Subjects underwent a comprehensive battery of tests of static and dynamic strength, range of motion of all extremities and trunk, touch and proprioception sensation of the feet, coordination, reaction time, temporal factors of gait static and dynamic balance, all of which were examined in relation to PPT score. Of the more than 100 variables

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probed (ANOVA), the following were significantly different between the three groups: preferred and fast velocity gait speed, cadence, double support time, time spent in the full tandem portion of the Romburg, one limb stance time, shoulder and knee flexion range of motion, hip extension and ankle plantarflexion (0,60,120°/s) strength. Findings indicate that few of the factors believed associated with physical frailty can discriminate between those that are mild and moderately frail versus those that are not frail.

Support: Claude C. Pepper OAIC AG13629

STABILITY OF FUNCTIONAL HEALTH PERFORMANCE ASSESSMENTS DURING SEVEN DAYS USING THE MDS RAI

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The MDS RAI requires functional health assessments for 7 days from all 3 shifts (21 assessments) when evaluating newly admitted nursing home residents, but clinical time constraints and staffing patterns often preclude compliance with this requirement. Our previous research documented stability in the majority of ADLs assessed on the day shift during 4 and 15 days following admission using Scaled Outcome Criteria. This prospective longitudinal study evaluated stability of residents' functional health performance using the MDS RAI (section G. Physical Functioning, questions 1a - j, 2; section H. Continence, questions 1a - b) with data collected at 3 points in time during 7 days on the day shift within the required 2 weeks following admission. Trained interviewers collected data from a series of 38 new admissions to 2 county-operated nursing homes. Repeated measures analysis of variance documented stability in 11 of 13 functional health indicators, and significant differences in only 2 of 13 functional health indicators. These findings supported our previous research, and indicated that fewer than the required 21 assessments may be accurately used for evaluation of residents' functional health performance. Research supported by the NIH National Institute for Nursing Research (1 RO1 NR04299).

ESTABLISHING THE RELIABILITY AND VALIDITY OF THE FUNCTIONAL AMBULATION PROFILE (FAP).

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The FAP measures time to walk in five environmental circumstances and accounts for the use of assistive devices. This study determined the reliability and validity of the FAP. Twenty-eight subjects post-stroke (mean age = 56.04 ± 12.80) and 28 able-bodied subjects (mean age = 56.43 ± 13.82) matched for age, height, and gender (men = 20, women = 8) were recruited. Subjects performed the FAP, the Berg Balance Test, the Functional Reach Test, and the Timed Ten Meter Walk Test (10MW) in random order during a single data collection session. Two investigators scored each subject simultaneously during each test. Interrater reliability was high, with ICC values $\geq .98$. Scores of subjects post-stroke were different compared to able-bodied subjects on all four functional tests ($p < .001$). Increased times on the FAP correlated with poor performance on the Berg Balance Test ($p \leq .01$) and slow 10MW gait speed ($p \leq .01$) in the group post-stroke. Able-bodied FAP scores did not correlate with Berg Balance Test scores but did correlate with the 10MW ($p \leq .01$). No correlation was found between FAP scores and the Functional Reach Test in both subject groups. Because the FAP differentiates post-stroke and able-bodied groups and is correlated with known measures of function, it may be an easily administered, inexpensive measure of functional ambulation. Additional validity studies in the same and different patient populations are necessary.

STRATEGIES FOR A PODOGERIATRIC ASSESSMENT PROTOCOL FOR AMBULATORY AND LONG TERM CARE

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Foot problems in the older patient and those with chronic diseases such as Diabetes Mellitus, Peripheral Arterial Disease, and Arthritis represent an "at risk" population. Ambulatory dysfunction and limitation of mobility can reduce the quality of life.

The program outlines concepts to focus on the burden of illness, etiology, efficiency, effectiveness, synthesis, implementation, monitoring, reassessment and their relationship to risk, professional education, assessment, risk stratification and methods to enhance independent living.

Information on education, assessment and the more common foot complications associated with chronic disease and aging will be identified. An assessment protocol will be presented, in relation to ambulatory care and long term care in a geriatric psychiatry unit. A format and protocol for professional and patient education and assessment will be described.

FROM OUTPUT MEASURES TO OUTCOMES: FUNCTIONAL CHANGE AND REHABILITATION.

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A process to evaluate outcomes in specialized geriatric programs, including inpatient assessment and rehabilitation units and day hospital, was initiated as part of an evaluation framework. This was achieved during a period of system uncertainties and constrained resources including budgetary cuts, hospital closures, and relocation of programs and services. After exploring alternative instruments to capture functional change, the SMAF (Le systeme de mesure de l'autonomie fonctionnelle or Functional Autonomy Measuring System) was piloted. The SMAF, a 29-item scale which measures functional ability in the areas of activities of daily living, mobility, communication, mental function, and instrumental activities of daily living, was chosen because it is relatively simple and quick to administer. Although the pilot indicated the need for developing a scoring standard and protocol, results were sensitive for this frail elderly population characterized by complex and multiple needs. Outcomes are now established in a data set including utilization measures (e.g., length of stay), patient-level measures (e.g., MMSE), accessibility and acceptability indicators, and function/mobility measures (e.g., SMAF). The quantitative data provided has been used to ensure comparability of a multisite program, to give an accurate description of a patient population, and to provide a means for formal program evaluation.

THORACIC KYPHOSIS, LUMBOSACRAL DEFORMITY AND CONFIDENCE IN MOBILITY: INTERDEPENDENCE OF EFFECTS AMONG OLDER ADULTS.

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To evaluate the association between thoracic kyphosis and confidence in mobility among older adults, and to estimate the joint effects of thoracic kyphosis and lumbosacral spine deformity, cross-sectional data from 3 subject samples were pooled: 1) community-dwelling, nondisabled elders (n=210), 2) women with osteoporosis and vertebral fracture (n=185) and 3) community dwelling elders with Parkinson's Disease (n = 57). Mean age was 75 +/- 7 years. Stratified analysis evaluated potential effect-measure modification and confounding by age, gender, group, comorbidity, hip strength, ankle range of motion, extremity sensory deficit, history of a recent fall, and depression. In crude bivariate analysis, kyphosis increased the odds of low confidence in mobility by 76% compared to subjects without kyphosis (OR = 1.76; 95% CI = 1.21, 2.59). Multivariable analysis demonstrated interdependence of the effect of thoracic kyphosis and lumbosacral hypolordosis. Age and comorbidity were the only confounders. Adjusting for age, comorbidity, and lumbosacral hypolordosis, subjects with thoracic kyphosis without hypolordosis demonstrated weak increased odds of low confidence in mobility (OR = 1.21; 95% CI = .76, 1.94). Subjects with hypolordosis alone demonstrated no increased odds of low mobility self-confidence (OR = 1.05; 95% CI = .59, 1.86). The joint effect of prevalent kyphosis and hypolordosis, however, was 2.78 times greater compared to subjects without deformity (95% CI = 1.13, 7.54). This suggests that the effect of these two types of spinal deformity is largely synergistic. Prevention or reduction of either deformity could result in decreased disability among older adults.

EXECUTIVE DYSFUNCTION IMPAIRS INDEPENDENT FUNCTIONING IN "MMSE-INTACT" PATIENTS

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Frontal lobe damage has traditionally been linked to executive dysfunction, which in turn has been connected with decreased ability to function independently. In this database study, we examine 19 male patients who showed significant deficits in the initiation and perseveration subtest of the dementia rating scale yet scored a 25 or greater on the mini-mental state examination. We compared this frontal group to 42 patients scoring well on the same dementia rating scale subtest, and found no significant differences in demographics, medical burden, agitation or degree of psychosis on hospital admission between the groups. Functioning as assessed by activities of daily living and independent activities of daily living questionnaires was also similar between the two groups on admission. The frontal group scored worse on admission using a consensus global assessment of functioning scale score. On discharge, the frontal group continued to score significantly poorer on the global assessment of functioning and showed a trend towards impairment in independent activities of daily living. We concluded that frontal dysfunction does impair patients' ability to function independently, but this is not often assessed adequately on tests most commonly used by clinicians, such as the mini-mental state exam or the dementia rating scale. We recommend testing for frontal lobe function with detailed instruments such as the EXIT interview or other specific tests in order to better predict independent functioning.

CHANGE IN FUNCTIONAL STATUS AND MORTALITY IN STROKE PATIENTS AFTER REHABILITATION

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Post-stroke mortality is high both in the acute phase and over long-term follow-up. Whether this excess mortality is a direct effect of the neurological damage or rather of its functional consequences is unclear. Barthel Index (BI), Mini Mental State Examination (MMSE) and a measure of neuromuscolar impairment (Fugl-Meyer, FM) and mobility (Lindmark) were assessed in 50 patients with unilateral ischemic stroke (age: 66± 9.9; range: 47-86; 31 M and 19 F) 15 days, 6 months and 1 year after discharge from rehabilitation. After a 7-year follow-up, 28 patients were still alive, 18 had died and 4 could not be traced. Patients who had died were older, more disabled and more likely to have experienced functional decline during the first year of follow-up. In univariate analyses low BI and MMSE at discharge and deterioration in BI, FM and mobility in the 1st year were associated with higher mortality. When all these potential prognostic factors were included in a multivariate model, only age and mobility remained independent predictors of mortality. Compared to those with mobility stable/improved, patients who experienced a deterioration of their mobility were 5.2 times more likely to die over the follow-up. These findings suggest that rehabilitation programs aimed at maintaining functional status after stroke may prevent the excessive mortality characteristic of these patients.

SHORT-TERM FUNCTIONAL STATUS OF POST-OPERATIVE GERIATRIC PATIENTS IN AN INNER CITY SETTING

Anthony Kingsley, MD Arnel Joaquin, MD, Kalpana Ganesan, MD:

OBJECTIVE: To determine the effect of non-emergent major or minor surgery on the short-term functional status of elderly patients DESIGN: Prospective, observational study SUBJECTS: Elderly patients 65 years and above in an inner city hospital METHODOLOGY: Pre-operative medical, functional and psychosocial assessments at 0, 3 and 6 months post-operatively RESULTS: Out of 24 consecutive patients, 22 consented to participate in the study. Average age was 71, 57% female and the average ADL and IADL scores were 17.5/18 and 6.1/8, respectively. The average Mini-Mental State Examination (MMSE) and Geriatric Depression Scale (GDS) scores were 22.3/30 and 7.1/30, respectively. None of the patients were considered high cardiovascular risk for surgery. Major surgery was 52% and minor was 48% and all received general anesthesia. All patients were discharged without any in-hospital complications. Six patients have completed a 3-month follow-up. The average ADL and IADL of these patients were 16.7 and 3.8, respectively. The MMSE and GDS were 17 and 7.1, respectively. CONCLUSIONS: Our initial data shows a trend towards an initial decline in scores in most assessment tools (except GDS) particularly IADL and MMSE. Understanding the issues surrounding this decline (e.g. poor pain control, deconditioning) is important in determining strategies to improve functional status in the short-term post-operative period.

NUTRITIONAL STATUS ASSESSMENT AMONG GERIATRIC PATIENTS IN AMBULATORY CARE SETTING

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Nutritional status plays a significant role in both the cause and treatment of systemic diseases and other common conditions in geriatric patients. The purpose of this study was to assess the nutritional status of ambulatory geriatric patient utilizing the GNC. The eriatric Nutrition Checklist (GNC) is composed of the ff. parameters: anthropometric, self, clinical and dietary assessment. Descriptive statistics and multiple correlation analysis was used to analyzed data. Majority of pts were found to be at risk for malnutrition. Age, sex, civil status, income and presence of caretaker were noted to be associated with the nutritional state. This study showed that ambulatory geriatric patients were at risk for malnutrition and several factors were identified using the 15 item checklist.

EVALUATION OF SEVERELY DEMENTED NURSING-HOME RESIDENTS: COMPARISON OF THE TSI AND THE BANSS SCALES

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Background. The standard instruments for the evaluation of cognitive functions have only limited ability to follow subjects with severe dementia because of a floor effect. In the last few years a number of new scales have been specifically developed to circumvent this problem; they can be divided into two classes: a) observer-based behavioral/symptomatological instruments and b) performance-based cognitive/functional scales. Strengths and limits of these two qualitatively different approaches still lack formal examination. Aim of the Study. We applied to the same sample a slightly modified version of the Test for Severe Impairment (TSI) (1) (score range: 0-46) and the Bedford Alzheimer Nursing Severity Scale (BANSS) (2) (score range: 28-7) in order to compare their characteristics and usefulness. Sample. A nursing-home population of 64 oldest old subjects suffering from moderate to severe dementia (CDR range:1-4), defined according to DSM-IV criteria. Mean age was 87.4±6.2 y.o. and mean education was 8.0±4.3 yrs. Results. Both the BANSS, and the TSI were independent from age and education. The BANSS could be computed for all subjects (18.8±4.9; range: 8-28), whereas the TSI (and the MMSE) could be applied only in 43 subjects (67.2%). Mean BANSS in the 21 subjects who could not be evaluated with the TSI was 20.9±4.0 (range:12-28) whereas it was 17.7±5.0 (range:8-27) in the remaining 43 subjects. Among the latter, 19 (44.2%) had CDR=3-4; 7 of them had a MMSE between 1 and 5 and 12 (27.9%) had a MMSE=0. The modified TSI was different from 0 in 37/43 subjects (86.0%) with a range 0-36 for those 19 subjects with a CDR=3/4. Using an ANOVA to compare the four CDR-defined subgroups, the mean scores at the TSI were significantly different for CDR stages 2 (40.9±2.8), 3 (30.2±5.1) and 4 (5.0±8.5), whereas no difference was detectable at the comparison between stages 1 (41.7±2.2) and 2. On the contrary, the BANSS discriminated only CDR stage 4 (23.0±1.9) from the other CDR stages, whereas it was not able to distinguish between CDR stages 3, 2 and 1 (mean: 15.7±3.0, 14.9±3.4 and 14.5±5.2, respectively), due to early ceiling effect. Conclusions. The TSI may have some utility in the moderate-to-severe range of dementia, whereas the BANSS seems most useful in the severe-to-very severe stages.

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EDUCATION LEVEL AND THE SHORT BLESSED ORIENTATION-MEMORY-CONCENTRATION (OMC) TEST

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The Blessed Information Memory and Concentration(IMC) test has been widely used as a dementia-screening tool. A six item shortened version of the IMC termed the Short Blessed or OMC was developed by Katzman(1983). Scores on the OMC have been highly correlated to scores on the IMC and the Folstein Mini-Mental Status Exam. Educational level has been identified as an important source of bias in dementia testing with the IMC and the MMSE. The purpose of this investigation was to determine the relationship of educational level to scores on the Short Blessed. The OMC was administered to 904 persons as part of a multidimensional telephone survey investigating falls in a mixed urban-rural predominantly African American population. Overall 38%(332/904) had scores consistent with dementia, for subjects with an 8th grade education or less 57%(175/304) had scores which were consistent with dementia. Regression analysis, controlling for age, race, gender, and county(urban/rural), shows that education level as a continuous variable is highly correlated with scores on the OMC($p = .001$) for this population. It would appear that as with other screening tests for dementia, education level may bias results of the OMC test.

Supported by CDC U48CCU409679

A MEASURE OF FRAILTY IN A SURVEY OF COMMUNITY-DWELLING OLDER ADULTS

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To understand frailty in a sample of 607 community-dwelling older adults, we developed a preliminary measure from a mailed survey which includes physical, psychological and functional components. Subjects were members of OASIS, a national education program for older adults (mean age 72 ± 7, 77% female, 54% married, 98% white). Total scores on the SF-12 Physical Health and Mental Health subscales, and percent change score on the Baum Activity Checklist were divided into tertiles. Subjects were given scores of 1-3 points for each measure, and the three were summed for a total frailty score ranging from 3-9 (mean score = 6.03 ± 1.5) with a higher score indicating a higher level of functioning and less frailty. As a measure of construct validity, the association of scores on this frailty index to related measures was examined. Index scores were negatively associated with recent number of days of poor physical health ($r = -.40$, $p < .0001$), days of poor mental health ($r = -.36$, $p < .0001$), and days of reduced activities ($r = -.34$, $p < .0001$). Subjects with lower scores were more likely to report needing help with their everyday chores and activities ($p < .0001$) and to report limiting their activities due to chronic conditions ($p < .0001$). Index scores were not associated with age, but higher scores were associated with increased physical activity ($p = .007$). Further study is needed to confirm the usefulness of this promising measure.

THE RELATIONSHIP BETWEEN A SHORT WALKING TEST AND MEASURES OF PERIPHERAL OCCLUSIVE DISEASE SEVERITY.

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Peripheral arterial occlusive disease (PAOD) patients have impaired walking ability, which may be assessed by using a simple 20 meter walk test. Therefore, the purpose of this study was to correlate a 20 meter walk test with other measures of PAOD severity [ankle/brachial index (ABI), graded treadmill exercise test (GXT), and 6-minute walk test]. Eighty patients with an age of 67 ± 8 years (Mean ± SD) were tested. The PAOD patients were instructed to walk at a fast but safe pace. The total number of steps taken and the time to complete the 20 meter walk test were recorded, and the velocity was calculated. The 20 meter velocity 1.19 ± 0.17 m/sec was correlated with the 6-minute walk distance (361 ± 83 m; $r = 0.57$, $p < 0.001$), maximal GXT distance (347 ± 215 m; $r = 0.34$, $p = 0.013$), but not with the resting ABI (0.63 ± 0.20; $r = 0.13$, $p = 0.262$). These data indicate that the 20 meter velocity administered at a fast pace correlates with functional measures of PAOD severity, but not with a hemodynamic indice of severity. This easily administered test may assist in monitoring PAOD patient's walking ability.

Supported by NIA (P60AG12583 and K01AG00657).

THE RELATIONSHIP OF TAMOXIFEN WITH DEMENTIA AND DEPRESSION IN ELDERLY NURSING HOME RESIDENTS.

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Tamoxifen (TAM), an established adjuvant therapy in patients with breast cancer, sometimes acts as an estrogen agonist, and other times as an estrogen antagonist. Our objective was to determine which of these roles TAM plays in its relationship with dementia, ADLs, and depression in the nursing home (NH). Participants were the 93,031 women, at least 65 years old, who were included in the 1993 New York State MDS. Each of the 1,385 women receiving TAM were matched with up to 4 controls on ethnicity, age, nursing home, and number of MDS evaluations. Analysis of these matched sets showed that women receiving TAM treatment were less likely to have Alzheimer's disease (risk ratio: 0.674, 95% confidence interval: 0.551 - 0.823), and were significantly more independent in eating ($P < 0.0001$), toileting ($P < 0.0001$), and transferring ($P \leq 0.0004$). They were, however, 42% more likely to have depression ($P < 0.0001$). TAM treatment was not associated with the prevalence of dementias that were not of the Alzheimer's type. These findings should be considered by physicians who are contemplating TAM treatment for elderly frail women. Further, TAM could be considered as a possible cause of depression among NH residents on this drug.

Awareness of Osteoporosis in the Nursing Home

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Osteoporosis (OP), a condition which contributes to fractures, is prevalent among nursing home (NH) residents. Though medications effective in increasing bone mineral density (BMD) are available, their use in the NH is not known. The objective of this analysis was to estimate the prevalence of such therapy use in NH residents with low BMD. Medication [Calcium, Vit. D, hormone replacement therapy (HRT)], fracture and diagnosis data from charts and forearm BMD via single-xray absorptiometry, were obtained on 2156 NH residents (mean age = 84, 81% female) between 1995-97 as part of a prospective study of fracture risk. Other pharmacologic agents (bisphosphonates, calcitonin) were not included as they were approved after study start. Twenty-two percent had severe OP (fracture + BMD >2.5 SD below young adult mean), 33% had OP (BMD>2.5 SD below) and 30% had osteopenia (OE) (BMD between 1 and 2.5 SD below). While 85% had low BMD and/or fracture history, 12% were diagnosed with OP and only 4% had record of treatment.

	Sev OP(n)		OP (n)		OE (n)	
Therapy	F (451)	M (32)	F (565)	M (145)	F (517)	M (123)
OP Dx	29%	6%	10%	2%	12%	4%
Ca/Vit. D*	4%	3%	3%	0	5%	2%
HRT**	1%	NA	1%	NA	1%	NA

*Ca and/or vit. D alone **HRT w/ or w/o Ca/vit.D

Despite the high risk of fracture in this population, the use of therapies to increase BMD was low between 1995-97, however awareness and treatment of OP is likely to increase due to the subsequent introduction of new therapies.

RISKS FOR INSTITUTIONALIZATION IN ALZHEIMER'S DISEASE

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Alzheimer's disease is very costly, chiefly due to the expense of providing institutional long term care. In a retrospective cohort study, we assessed how clinical course and caregiver characteristics affect institutionalization in patients with Alzheimer's Disease. Patients (median 77 years; 67% women, 50% married, median 11 years education) from one of two Memory Disability Clinics in Nova Scotia, Canada were recontacted at a median time of 32 months after initial diagnosis. Age, gender, living arrangements, caregiver burden, global dementia stage, degree and progression of cognitive and functional impairment were measured as exposures. Institutionalization and death were the main outcomes, analysed using Cox regression modelling. The proportion remaining in the community at 12, 24 and 32 months were 78% (73%-83%), 62% (56%-68%) and 52%(45%-60%) respectively. A non-spouse caregiver, unmarried status, severe functional impairment, severity of dementia and signs of progression to advanced dementia are associated with decreased community survival in patients with Alzheimer's disease.

THE SUCCESSFUL WITHDRAWAL OF THYROID HORMONE THERAPY FROM NURSING HOME RESIDENTS.

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Purpose: To investigate if nursing home residents could be successfully withdrawn from thyroid hormone therapy (THT) without adverse effects.

Methods: Four nursing homes were selected for study. All residents on THT were eligible for inclusion in the study. Exclusion criteria were: an elevated thyroid stimulating hormone (TSH) level in the nursing home record, history of a thyroid nodule, on Lithium or Amiodarone, a palpable goiter, and a base line TSH above 8. Remaining patients had their thyroid hormone dose reduced by approximately half. A TSH was done 1 month later. If less than 8, THT was discontinued and a TSH was done a month later. If still below 8, a free T4 was done to rule out pituitary disease. If normal, the patient remained off THT and had a final TSH after a further 2 months.

Results: There were a total of 915 patients at the 4 homes. 115 were on THT. 40 had elevated TSH levels in their record. 31 refused to participate in the study. 22 met other exclusion criteria including death or discharge before the end of the study. 22 were initiated on hormone withdrawal. 11 were successfully withdrawn.

Conclusion: THT may be safely withdrawn from many nursing home residents.

Making Dementia Special Care Special: Promoting Behavioral Alternatives to Psychotropic Medication

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Dementia Special Care Units within long term care facilities have greatly increased in prevalence. The outcomes of these programs in terms of quality of care, impact on residents and specific interventions unique to dementia are vague and poorly described. Higher than average rates of psychotropic drug use are common among these units. Despite the tremendous opportunity such units afford, little has been reported regarding the specialized use of behavioral interventions.

A 63-bed dementia special care unit was initiated within an 816-bed academic nursing home. Individual behavioral plans, as adjuncts and alternatives to psychotropic medication therapy, were devised by a Geriatric Nurse Practitioner, in collaboration with a Gero-Psychiatrist. Behavioral interventions, including operant conditioning regimes, stimulus reduction and reinforcement protocols were devised for each type of symptom. Agitation syndromes responded well to behavioral interventions, however, symptoms of paranoia and depression improved also. Over a 3-year period, use of psychotropic medication was significantly reduced, from 24% to 3% (p<.05).

Organized behavioral intervention techniques can dramatically reduce the use of psychotropic medication on a dementia special care unit. This may offer the element of truly "special" care often lacking on such units.

Process Issues in Outcomes Measurement Collection: The First 100 Patients to a New Sub-acute Unit

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Outcomes tracking and measurement is the healthcare delivery equivalent to measuring yield or inventory turns in other business settings. At Parker Jewish Institute for Health Care & Rehabilitation, a team established a plan to measure processes considered critical to the Institute's marketplace

The process included choosing measurements to capture the rapidly changing health care environment, including managed care variables. This process moved away from the traditional measures of production volume, important in fee-for-service environments, to measures of results.

The outcomes measurement team set up a data collection system to compile and analyze information collected on the first 100 patients admitted to a dedicated subacute unit. Demographic control items, clinical outcomes, financial data, and day of discharge satisfaction survey questions were captured. Clinical outcomes included infections, onset of acute episodes of care, wounds, incidents and therapy. Financial data included payment sources. Patient satisfaction measured overall satisfaction plus medical, therapeutic, environmental and food factors. This study reports approach, data collection, findings, and plans to move forward with the experience gained from the initial process.

AMANTADINE USE ASSOCIATED WITH HISTORY OF SEIZURE. JM Manzi, W Saulog, S Leventer. The Parker Jewish Institute for Healthcare and Rehabilitation, New Hyde Park, New York.

Background: Amantadine is an antiviral agent that has activity against influenza A. The current recommendation for amantadine prophylaxis following an influenza A outbreak is 200mg as a single daily dose for 2-4 weeks. For adults over 65, the recommended daily dose is 100mg. Amantadine crosses the blood brain barrier.

Case Report: An 85-year old woman with a history of a single post-stroke seizure suffered a recurrent seizure during amantadine therapy to prevent influenza A. She was started on a prophylactic regimen of amantadine following three cases of cultured influenza A in the institution. Her history included a single generalized tonic-clonic seizure. Anti-epileptic medication had been discontinued more than two years prior to the initiation of amantadine therapy with no reported incidence of seizures.

Recommendations: Prior to flu season, some nursing facility patients can be identified as "at risk" of adverse effects from amantadine. The attending physician is in a position to identify patients with 1) advanced age 2) renal insufficiency 3) history of seizure disorder (esp. generalized tonic-clonic) 4) low body weight (<100lbs). These characteristics may signal the need for a neurologic evaluation, including EEG and careful monitoring of the patient. Prophylactic seizure medication should be seriously considered for certain patients that require amantadine therapy for prevention of influenza A.

What Are The Outcomes of Long-term Anticoagulation in Frail Elderly Patients with Atrial Fibrillation?

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Atrial fibrillation (AF) can mean death or disability for an individual and increased medical cost for society.

Material and methods: Outcomes of long-term (more than 1 year) anticoagulation were examined retrospectively in 87 patients (13 males and 74 females) with nonrheumatic AF at 5 metropolitan nursing facilities. The mean age was 82.4 years (SD 7.7), 26% had a previous stroke or TIA, and co-morbid conditions varied from 1 to 5. Coumadin was given at an average dose of 2.8 mg (SD1.1). The intensity of anticoagulation was measured as 12 monthly INR values. The end points were a stroke/TIA or a major bleed.

Results: 16(18.3%) of these patients had adverse outcomes-4 strokes, 1 TIA, and 11 bleeds. Three strokes and 5 bleeds were fatal. Importantly, 4 strokes and 9 bleeds developed in patients older than 75. There was no difference in INR values (2.1, SD 0.5 and 0.4) for the groups with and without adverse outcomes. The average INR at the time of the bleeds was 2.5. Male gender was a risk factor for an adverse outcome ($p < 0.02$ by chi square).

Discussion: The rate of hemorrhages (12.6%) was higher than the rate in SPAF-2 subgroup of patients older than 75 (8.1%) and was seen with a lower average INR (2.1 vs 2.7). Note that 15% of patients in the SPAF-2 subgroup but 91% of patients in our study had two or more co-morbid cardiovascular conditions. A prior thromboembolism was present in 8% of patients in SPAF-2 and in 74% of patients in our study.

Conclusion: The clinical course in the very old and frail patients can not be predicted within the therapeutic range of INR values. It is doubtful that the lower segment of the therapeutic INR range provides any safety benefit in this patient population.

On-Call Coverage in an Academic Nursing Home

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Patients who reside in a nursing home often require urgent evaluation by on-call physicians. We studied the most common medical conditions requiring physician contact in a 400 bed academically affiliated nursing home. Physicians maintained an on-call log book to record the patient related problems encountered during evenings, nights and weekends. A total of 236 calls received over a six week period were sampled at random. The type of calls were categorized based on the individual problem encountered in the institution. The most frequently encountered reasons for contacting on-call physicians included: 42 calls (18%) for medication clarification and renewal, 30 calls (13%) for fever, 25 calls (11%) for gastrointestinal symptoms, 14 calls (6%) for abnormal lab results, and 12 calls (5%) for abnormal glucometer measurements. 15 of the 236 calls (6%) sampled required transfer to the emergency department of the adjacent hospital. The type of patient related problems most likely to require emergency department evaluation included: 2 of 2 calls (100%) for acute chest pain, 4 of 8 calls (50%) for dyspnea, 3 of 30 calls (11%) for fever, 2 of 7 calls (29%) for falls, and 2 of 7 calls (29%) for neurological problems. We conclude that there are a number of situations, such as chest pain, dyspnea and high fever which require emergency physician contact. In other cases, calls requiring clarification of orders could be eliminated by careful medication ordering practices by physicians.

DAILY SURVEILLANCE ROUNDS: A MEANS TO THE ARREST OF AN OUTBREAK. A. Therady, RN F. Silverstone, M.D., K. Biggin, RN, S. Costella, RN, Parker Jewish Institute for Health Care and Rehabilitation New Hyde Park, New York 11040-1437.

The U.S. population age 65 to 85 is increasing rapidly. The number of people over 85 years has doubled in the last fifteen years and 20% of them reside in long term care facilities. Health care of older adults is becoming more challenging because they are more

frail and vulnerable with increasing comorbidities and decreasing resistance. Consequently they are at an increased risk for acquiring infections.

The infection control nurse in long term care setting plays a significant role in both, the prevention and early recognition of infections in the residents.

This paper will describe how the practice of a daily surveillance round by the infection control nurse in a long term care facility was instrumental in identifying the beginning of an outbreak of Influenza "A", leading to the immediate institution of epidemiological control measures and treatment. It will detail the strategies which resulted in the arrest of an outbreak within four days.

DIAGNOSIS OF *CLOSTRIDIUM DIFFICILE* IN THE NURSING HOME

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In the nursing home, diagnosing significant diarrhea is difficult because of problems obtaining stool specimens from residents with dementia and disagreement on when to pursue *clostridium difficile* testing. Results of Cell Cytotoxin Assays for *c difficile* can take several days to be reported. Residents often face delays in treatment, resulting in dehydration, falls, skin problems, and increased confusion. Randomized controlled trials have not been carried out in the nursing home and further testing is indicated. The purpose of this retrospective study was to determine if the variables of recent antibiotic use, recent hospitalization, and significant diarrhea (three or more watery or partially formed stools in 24 hours) would be predictive of positive *c difficile* cytotoxin results. In a 158 bed multi-level nursing home, the medical records of 38 residents diagnosed with diarrhea during a 12 month period were reviewed. Of these residents, 76% had recently taken antibiotics. Stool studies ordered for diagnosis included 82 separate *c-difficile* cytotoxin assays (each costing $49.00) of which 51% (42) were positive. Recent antibiotic use was highly correlated with positive results. Of those testing negatively, medications were sometimes changed. Residents without recent antibiotic use are unlikely to test positively and do not require routine cytotoxin testing and approximately 40% of these assays could have been avoided.

Family Health Care Needs During the Placement Process.

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Admitting an elderly person to a nursing home is one of the most stressful experiences a family member can undergo. Previous work suggests that health care providers do not accurately identify or provide for family needs during this time. In this study, 54 family members (M age 60 ± 11.5) involved in the placement process were interviewed about their caregiving situation and perceived needs. Subjects were primarily female (*n*=43), caring for a parent (M age 79.75 ± 8.2), and in a good state of health. More than half were employed. The majority rated their relationship with the older person as "good" prior to admission. Respondants were asked who was involved in making the decision for placement. In the majority of cases, the respondant identified him or herself as the primary decision-maker, but physicians, the older person, and extended family also played an important role. Written information on the placement process was not as helpful as discussions with health care providers. Two open ended questions on things that would be helpful during and immediately after the placement yielded a variety of responses with clinical implications. Needs during the placement process were distinct from those after the admission had occurred. Overwhelmingly, subjects found the placement process extremely difficult ("the worst thing I've ever had to do"), and had many suggestions on how health care providers might improve the experience for them.

USE OF CALCIUM ANTAGONIST VERSUS BETA-BLOCKERS IN NURSING HOME POPULATION.

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Both Beta-blockers and calcium antagonists are effective for treatment of hypertension, coronary artery disease and atrial fibrillation. Because of the recent reports of adverse effects of calcium antagonist on cardiac mortality B-blockers would be the drugs of choice. Recent studies have suggested under use of beta-blockers in nursing facilities. We performed a retrospective study with the following goals:

1) Define the prevalence of use of B-blockers versus calcium antagonist in NH population.
2) To study the indications for their use.
3) To evaluate the appropriateness of their use.

A chart review of NH residents showed that we had 81 residents on calcium channel blockers and 48 residents on beta-blockers. The preliminary findings suggest that in elderly, calcium antagonist are used more often because of absolute or relative contraindications to B-blockers including congestive heart failure, COPD, depression, diabetes, and bradycardia.

Our conclusion is that Beta-blockers are less often used in elderly NH population because of contraindications to their use rather than physician preference.

Siderails and Staff Attitudes in Nursing Homes

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The use of siderails in nursing homes is controversial, yet studies of siderails are rare. Our study explored siderails, and injuries and accidents among residents and staff. We compared 279 residents in beds with standard siderails with an equal number of residents in beds with smaller siderails that could be lowered close to the floor. We also administered questionnaires to staff at 6 facilities (in 5 states) about their knowledge of, and attitudes to, siderails.

Staff provided data about their position (RN, LPN, CNA or rehabilitation professional), sex, height, age, years on the job, and ethnicity. Linear and logistic regressions of preliminary data suggest that all nurses of all levels and rehabilitation staff have similar knowledge levels, and shared similar attitudes to the use of siderails. Frequency distributions showed that 60% of staff reported that siderails pose a risk to safety, 67% reported that they can cause injuries, and 78% reported that siderails help residents turn in bed, and 56% reported that are used when residents transfers.

Significant differences existed between whites and blacks: whites are less likely to believe 1) that smaller siderails are as useful as larger rails, and 2) that residents use siderails to move up and down in bed. In multivariate analyses, CNAs are more likely than RNs to think that families can request siderails (P<0.004), and RNs are more likely than Rehab. professionals to think that residents prefer to have siderails up (P<0.01).

FRAIL ELDERS WITH MINIMAL-CARE NEEDS REASONS FOR LIVING IN NURSING HOMES

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As the number of frail elderly grow, there will be increased demands made on nursing homes to provide assistive and health services. At the same time, nursing homes costs are rising and many question the quality of nursing home care. As a result, it is imperative that alternative models of care for the frail elderly be developed. This descriptive pilot study aids in this process by identifying the reasons frail elders with minimal-care needs choose to enter and remain in nursing homes. Subjects with minimal-care needs were identified by staff at three nursing homes (n=20). An open format questionnaire was used to elicit the reasons for entering and remaining in a nursing homes and to identify who was involved in the decision. The results showed that frail elders entered nursing homes because of a health crisis, the need for daily assistance with ADLs; or mobility problems. They made the decision to enter with the advice of family members. Although preferring to live at home, they remain in nursing homes because they know of no other option, believe that they need ongoing assistance with ADLs or health monitoring, or do not feel safe living at home.

PREVENTIVE PRACTICES IN ELDERLY MINORITY WOMEN.

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As the population ages and becomes more impaired, preventing disease and promoting good health become extremely important. Several studies suggest that elderly minority patients do not receive preventive measures that are indicated. The objective of the study was to identify the unmet preventive services among women who are seen in this facility. We surveyed a convenience sample (n=105) of women aged 50 and above (mean age 61.8) from inpatient and outpatient units. There were 52 Blacks, 46 Hispanics and 7 others. Thirteen percent (12/93) reported self breast examinations monthly. Eighty-one percent (83/102) have had a mammogram within two years and 19% (19/102) never had one or had one over 2 years ago. Twenty-two percent (22/102) have never had a Pap smear. Twenty-two percent (17/76) have had Stool occult blood done and 33% (34/104) have had annual rectal examination. Only 10% have had sigmoidoscopy. Among chemoprophylaxis, 24% (24/100) reported aspirin use, 25% (26/104) reported calcium use and 23% (23/100) reported hormone replacement therapy use. Among the immunizations, 16% (17/104) reported receiving pneumovax, 23% (24/104) influenza and 26% (26/102) tetanus vaccine. Fifty-nine out of 104 (57%) and 52 out of 104 (50%) did not receive pneumovax or influenza vaccine respectively even though they were eligible to get the vaccination. All preventive services were underutilized. Colorectal cancer screening and immunizations were most underutilized. There is a need for physician and patient education.

MEDICAL CONDITIONS ASSOCIATED WITH HOSPITALIZATION OF INDIGENT NURSING HOME RESIDENTS

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The hospitalization of elderly nursing home residents has been associated with declines in functional status beyond the acute condition. In addition, the cost of treatment in the hospital vs. the long-term care facility (LTCF) is significantly higher. The purpose of this study was to identify the medical conditions associated with hospitalization of an indigent LTC population and to determine any differences based on age group and gender. There were approx. 1400 county patients residing in 20 LTCFs. All admissions from these LTCFs were analyzed for a 12 month period (excluding those <65 yrs). Of the 421 admissions, there were 315 individuals; of whom 75.6% were admitted only once. 219 (69.5%) female, 96 (30.5%) male, mean age 82.6 (± 8.3). The avg. length of stay (LOS) was 6.58 days (± 4.5); there were no statistically significant differences in LOS by age group or diagnosis category. The most common reasons for admissions were as follows: pneumonia -87(27.6%), cardiovascular -55(17.5%), fractures-39(12.4%), urinary tract infections-31(9.8%), GI bleeds-28(8.9%), infectious disease, other -23(7.3%). There was a significant difference across the three age groups (65-74, 75-84, 85+) in the frequency of diagnosis categories, p=.05. The overall mortality rate was 11.7%, with pneumonia as the primary diagnosis across all age groups -18(48.6%). Infections (including pneumonia, UTI, skin/soft tissue) are the leading cause of hospitalizations of LTC residents and accounted for 896 hospital days. It appears this population has a significantly higher rate of infection than that found in the literature (44.7% vs 27.4%).

DEVELOPING A RESIDENT FOCUSSED MODEL OF CARE FOR RESIDENTS WITH ALZHEIMER'S DISEASE OR A RELATED DEMENTIA

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The Alzheimer Research and Education Program was established to identify optimal models of care for residents who have Alzheimer's disease or a related dementia. Five long-term care facilities in Ontario Canada participated in the study to assess the degree to which resident focussed care is supported. Model building started with the baseline data collection. The goal was to develop a set of measurable outcomes related to resident focussed care. First we reviewed the incident reports to identify the specific behaviours and events and developed educational programs to address approaches to care. Falls and aggressive acts were found to be the most frequent events appearing in more than 60% of the reports. Behaviour mapping of residents was completed to identify location, frequency and intensity of disruptive behaviours. Staff, family and residents completed questionnaires on their knowledge and attitudes regarding the use of restraints. Data from the questionnaires indicated that staff education on alternatives to use of restraints was needed, and that families felt unaware of facility policies regarding the use of restraints. Finally we assessed the characteristics of the residents in the facilities, to capture the demographic information, diagnosis, and need for supervision and support. In the facilities the resident population had an average age of 87.5 years, approximately 70% had some degree of cognitive impairment and more than 50% required help with feeding, dressing and grooming. The resulting model of resident focussed care will be presented along with a set of outcome measure which can be used to assess success.

MANIFESTATION OF VERBALLY AGITATED BEHAVIORS: EFFECTS ON EXPERIENCED AND NON-EXPERIENCED LISTENERS

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The purpose of this study was to examine how verbally disruptive behaviors manifested by agitated nursing home residents are perceived by experienced and non-experienced listeners.

The perceived disruptiveness of the vocalizations of 25 nursing home residents (20 females and 5 males), were rated by 10 experienced (nursing assistants at a special care unit) and 10 non-experienced female listeners.

Pearson correlations calculated between both groups for each one of the scales showed high consistency between both types of raters (r between .94 and .97, p=.000). However, non-experienced listeners perceived the vocalizations as more urgent, demanding and discomforting than experienced listeners. Male residents were consistently perceived as more disruptive than female residents by both types of listeners. Additionally, experienced and non-experienced listeners rated the vocalizations of Alzheimer's residents as more disruptive than those of other demented residents. Results suggest that the perception of disruptive vocalizations are influenced by the extent to which listeners are familiar, trained or habituated to care for agitated residents.

This study was supported by NIA grant #R01AG10642

THE EDEN ALTERNATIVE: OUTCOMES EVALUATION

V. Brooke, The Univ. of Texas Medical Branch Sealy Center on Aging, Galveston, TX 77555.

Participants:

B. Barba, A. Tesh, N. Courts (Univ. of North Carolina, Greensboro, NC 27420) Characteristics of Nursing Homes That Edenize.

S. Ransom (Southwest Texas State Univ. Institute for Quality Improvement in Long-Term Care, San Marcos, TX 78666) Quality Indicator Trends in Edenizing Homes.

J. Drew, V. Brooke (The Univ. of Texas Medical Branch Sealy Center on Aging, Galveston, TX 77555) Evaluation Outcomes in an Edenizing Home.

Discussant:

W. H. Thomas, Eden Alternative, 742 Turnpike Rd., Sherburne, NY 13460.

The Eden Alternative (Thomas, 1996) is a social model that addresses the problems of lonliness, helplessness, and boredom among nursing home residents through interventions that foster companionship and caring relationships with animals, plants, and children. Evaluation research programs vary in their approaches to selecting and measuring Eden concepts and in approaches to linking outcomes of Eden interventions with overall quality improvement. This symposium will:

1) Present the findings from three research programs;
2) Compare the similarities and differences in the findings; and
3) Contrast the variations in evaluation design and in methods of operationalizing the Eden concepts.

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ATTITUDES OF HEALTH CARE PROFESSIONALS TOWARDS INFLUENZA VACCINATION IN THE ELDERLY

B.J. Johnson, W.T. Davis, and F.T. Sherman. Department of Geriatrics and Adult Development and General Medicine Care Center, Mount Sinai Medical Center, NY, 10029.

A quality improvement project was established to improve the low influenza vaccination (IV) rate during the 1996-97 influenza season among geriatric patients in two adult practices. We surveyed professional staff including physicians, nurses, nurse practitioners, social workers and medical office assistants in two primary care practices about their attitudes and actual practices regarding IV. Ninety-one staff members were surveyed in the primary care adult practice (AP) and 38 staff members in the primary care geriatric practice (GP). Ten percent of AP staff and 17% of GP staff had "reservations" about IV. Eleven percent of AP staff and 14% of GP staff claimed they "would not recommend" IV to patients over the age 65. Seventy percent of AP staff and 57% of GP staff claimed that "patient refusal" was the number one barrier to IV. Allergy to the vaccine was the second most common reason for no IV. Twenty-five percent of AP staff and 31% of GP staff did not plan to personally receive IV. These data indicate that a significant minority of elderly patients and professional staff are eligible but do not receive IV because of negative biases and/or false perceptions about IV.

IMPROVEMENT IN INFLUENZA VACCINATION RATES IN THE ELDERLY IN TWO ACADEMIC PRACTICES: OUTCOMES OF A QUALITY IMPROVEMENT PROJECT

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Influenza vaccination rates have been shown to be low amongst high risk individuals and the elderly. The purpose of this quality improvement project was to increase the administration rate of influenza vaccine (IV) to patients over age 65 in both a primary care adult practice (AP) and a primary care geriatric practice (GP) at an academic medical center. The goal was to offer IV to 100% and to administer IV to 80% of patients in each practice during the 1997-98 influenza season.

A baseline random sample (127 charts per practice) revealed that IV was given to 42% of AP and 67% of GP patients during the 1996-97 influenza season. The practice policies and procedures were examined to identify reasons for the low rate of IV administration. An intervention program consisting of pre-printed orders, patient and staff education, and adherence monitoring procedures was implemented. A mid-season (November 15, 1997) random sample of patients who had visited the practice since September 1, 1997 (150 per practice) revealed that 88% of AP and 97% of GP patients were offered IV while 72% of AD and 81% of GP patients received IV. Results of the end-of-season random sampling of charts will be contrasted with the mid-season data and the project's goal.

PATIENT EDUCATION PREFERENCES IN AN OFFICE-BASED PRIMARY CARE GERIATRICS PRACTICE

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In order to plan patient education efforts for our primary care practice which serves 2400 outpatients, we conducted a survey during a 2 week period in February 1998. Questionnaires were completed by patients or caregivers in the waiting room prior to physician visit. The mean age of patients in the practice is 76 years, 55% of the patients are Caucasian, 41% are African American., 72% are female. English was the primary language for 91% of our respondents. Forty -seven percent of respondents are Protestant, 21% Catholic, and 15% Jewish. A random sample of 200 charted problems documented hypertension, dementia, confusion/delirium, arthritis, atherosclerotic cardiovascular disease, depression and as the most prevalent diseases.

The preferred method of learning indicated in the questionnaires was mailings in 47% of respondents. Individual counseling was preferred by 21%. Group sessions were preferred by a small proportion of patients. There was often marked discrepancy between prevalence and request for education, especially with hypertension. Further work will investigate which patient-centered educational techniques influence patient behavior.

SMOKING CESSATION MAINTENANCE AMONG ELDERLY ADULTS: HEALTHY COMMUNITY PROGRAM-BREATHING FREE (HCPBF)

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Tobacco use is a significant health threat to the elderly. With our HCPBF, we trained volunteer senior citizens at Florida's largest Senior Center in Charlotte County, FL to deliver a comprehensive smoking cessation program. We performed a randomized study to determine the influence of a walking program on smoking cessation rates, determine if factors shown to correlate with smoking cessation in younger adults are experienced in older aged smokers who quit, and to train volunteer health community specialists to conduct the smoking cessation program. The program schedule included a Quit program: orientation, free nicotine patches, Quit Day (QD), and stress management/prevention relapse lectures, and a Maintenance program: 6 weekly sessions of either walking or group support meetings. Patients were randomized to either maintenance program group after QD. Follow-up visits were 3, 6, and 12 months. 27 participants signed-up, 19 over age 65. 93% attended session 3 (48 hours after QD). Patch problems were reported by 22% of patients. By 4 weeks 77% and by 7 weeks 36% reported abstinent respectively. There was no change at 3 months. 33% of the participants gained more than 5 lbs. In conclusion, there was a high level of interest in smoking cessation in this group of elderly smokers. 1/3 of those who attended the QD session continued in the program, achieved abstinence, and tolerated the nicotine patch. Group Support meetings were preferred over walking. Further studies are needed to expand on and confirm these initial encouraging results.

PATIENT CARE PLANNING INVOLVEMENT AND HEALTH OUTCOMES AMONG COGNITIVELY INTACT HOME CARE RECIPIENTS

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With increases in chronic illness and life expectancy, it is critical to maintain wellness and promote improvements in health among older adults. It was hypothesized that if older adults could be involved in the care planning of their home care services, they would be empowered with active decision making and participate in care planning interventions. This would consequently assist their recovery, and maybe allow them to remain at home longer. To test this, a study lasting 6 months, was designed to involve the older adults in their "care planning" as opposed to being just recipients of care. The study population (n=74), 38 women and 36 men aged 65 to 78, were patients visiting local hospitals/clinics and receiving in-home care. The sample had no cognitive impairment or terminal disease and was divided into 2 groups, A and B. Group A (n=37) was offered an "Active Involvement 5 Phase Care-Planning Intervention" involving: 1) Patient Interview/Involvement Phase; 2) Patient Functional/Geriatric Assessment Phase; 3) "Condition-Intervention" Itemizing Phase; 4) Care Planning Model Development Phase and finally 5) Involvement Of Patient In Treatment Related Care Planning Phase. Protocols were developed for each of the conditions being tested. Group B, the control group, received home care without the "5 Phase Intervention" process. Group A, (18 men and 19 women), displayed better self perceived wellness, improvement in diabetes management, hypertension management, improved gait, improved mobility, better diet management, etc. Intense involvement in care planning and extensive interaction with caring staff can significantly enhance treatment outcomes.

Senior Screening Health Assessment & Preventive Education (SHAPE) Program customer satisfaction survey. S. Dhanani, S. Castle, J. Damron-Rodriguez, L. Perdelwitz, J. Bowers and A. Hillman. GRECC, West LA VAMC, UCLA, LA, CA 90073

One of the main objectives of the Department of Veterans' Affairs is to achieve a high level of customer satisfaction while providing quality health care to the nation's veterans. We conducted a phone survey to assess the level of satisfaction among the participants of the Senior SHAPE program which is a community outreach program that provides geriatric screening and targeted health education to minority older veterans. All interviews were conducted by the same person to ensure consistency. Of the 125 patients that were attempted to contact, 98 were reached and all agreed to be interviewed. The survey showed that 37% of the participants were made aware of a new health problem, 79% rated the educational material as helpful to very helpful, 93% felt the waiting time was good to excellent, 100% rated the staff courtesy as good to excellent and 99% found the physician explanation of the results as excellent. The results indicate that the Senior SHAPE program has achieved a high level of satisfaction among the participants and has been effective in identifying new health problems and providing disease-specific educational materials.

PRIMARY CARE AND HEALTH EDUCATION FOR AGING PERSONS IN RURAL AREAS. . S.A. Hendrix, B.K. Haight, College of Nursing, Medical University of South Carolina 171 Ashley Ave. Charleston,SC 29401.

A shortage of physician manpower exists in many rural areas, and access to health care and social services for rural elderly is a growing concern. The problem is increasing in some areas of the south as rural elderly age in place and are joined by a large in migration of older retirees. The purpose of this program was to present three different approaches to solving the problem of gerontological education and access to services in three rural communities of one state. Group 1 received a traditional public health education approach to the aggregate, and Group 2 received a traditional case management approach to the individual or family working with the primary care provider. Group 3 received both methods, individual and aggregate. Preliminary results indicate it was more valuable to have both programs in one community and that each program reinforced the other. It also showed that Participants in Group 3 were largely African American, had higher incomes, and were more satisfied with their primary care services. Using key community leaders as the method of entry into the communities was another important variable. These findings will help those seeking to introduce new resources or educational programs into rural communities. Funded by US Dept of HHS, Bureau of Primary Health Care.

LIFE REVIEW: TREATING THE DYADIC FAMILY UNIT IN FAMILIES WITH ALZHEIMER'S DISEASE B. K. Haight, D. Bachman, S. Hendrix, M. Wagner, A. Meeks. Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

This presentation reports the preliminary results and ongoing process of this dyadic family intervention with 43 subjects in 3 groups who are experiencing Alzheimer's disease and caregiving at home. Sixty-seven percent of the caregivers were female and 20% African-American. Most (88%) were in a spousal relationship. Care receivers varied by group on function and cognition. The majority of care receivers (39.5%) staged with the FAST were in stage 5. Most of those staged at 6 or above (23%) were unable to actively participate in the life story book intervention. However, 72% staged at 5 or below were able to successfully participate in the life review process which requires structure, evaluation, and integration. In a qualitative analysis of care receiver's life reviews, one completed a grieving process, another re-evaluated and reintegrated issues of abuse from childhood. Quantitatively, using one way ANOVA, the caregivers receiving the intervention improved significantly on measures of depression ($p<.01$) and burden ($p<.05$) and judged that the care receivers who made a life story book also significantly improved mood ($p<.04$).

EXPANDING THE INDEPENDENT YEARS OF THE OLDER ADULT BY PROVIDING HEALTH PROMOTION AND DISEASE PREVENTION PROGRAMS. Carol H. Boles, and Sylvia A. Flack, Nurse-Managed Center for the Elderly, Division of Health Sciences, Winston-Salem State University, Winston-Salem, NC 27110.

Older adults do not often access health care services because of factors such as mobility and physical problems, transportation, sickness, socioeconomic constraints and fear of institutionalization and of dehumanization. Most older adults are interested in learning about health promotion, disease prevention, and maintaining a healthier lifestyle.

The Nurse-Managed Center for the Elderly provides services designed to prevent avoidable decline associated with aging. Health services offered through the community-based center consist of assessment, screening, education, counseling, basic health care, and referrals. These are offered by the University's

professional faculty and students including nursing, social sciences, physical education, therapeutic recreation, physical therapy and clinical laboratory science. The benefits or providing this health care includes: improved health and social benefits to the elderly; reduced cost of health care of the elderly by assisting in decreasing the need for hospitalization; clinical experiences and research opportunities for the University faculty and students; and developing effective partnerships with community agencies.

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ATTACHMENT AND FAMILY RELATIONS IN LATE LIFE

N. G. Bliwise, Georgia School of Professional Psychology, 990 Hammond Dr., Atlanta, GA 30328

Participants:

B. D. Carpenter (Psychology Dept., Philadelphia Geriatric Center, Philadelphia, PA 19141) Work Status and Adult Attachment Bonds: Effects on Older Adult Caregiving.

S. Sorensen (Utah State University, Logan, UT 84322) & J. Webster (Langara College, Vancouver, B.C., Canada) Adult Attachment Style and Preparation for Caregiving.

H. L. Horne-Moyer & N. G. Bliwise (Georgia School of Professional Psychology, Atlanta, GA 30328) Attachment and Reactions to Nursing Home Placement.

L. Troll (University of California, San Francisco, San Francisco, CA, 94143) Age and Gender Differences in Attachment at the End of Life.

Discussant:

B. deVries (San Francisco State University, San Francisco, 94132).

Attachment theory is increasingly being used as a general conceptual framework to guide research on social relations across the life span. While much of the research on adult attachment has focused on romantic relationships, researchers are beginning to extend attachment concepts to a broader range of family and friendship patterns. This symposium presents findings from a set of studies that examine family relationships in late life. Within these studies, different strategies for measuring attachment and different types of relationships are employed. Individual differences in attachment are examined as predictors of older adult caregiving and adjustment to the nursing home placement of elderly family members. Age and sex differences in the structure of the relationships of the oldest old are explored within an attachment framework. Work role obligations are examined as a mediator of the relationship between attachment and caregiving. Implications of these findings for the study of adult attachment and attachment theory are discussed.

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THE CONTEXT OF WELL-BEING IN LATER LIFE: PSYCHOLOGICAL AND SOCIAL PERSPECTIVES.

D. K. Mroczek, Dept. of Psychology, Fordham University, 441 East Fordham Rd., Bronx, NY 10458-5198.

M. Brennan, Arlene R. Gordon Research Institute of The Lighthouse Inc., 111 E. 59th St., New York, NY 10022.

Participants:

D. K. Mroczek, P. M. Calabrese, D. M. Katz, C. A. McKinzie, & R. A. Shippy. Dept. of Psychology, Fordham University). The effect of age, context, and personality on psychological well-being.

M. Brennan & G. Cardinali. (Arlene R. Gordon Research Institute of The Lighthouse Inc.) Maintaining and regaining well-being in later life: Use of pre-existing and novel coping strategies in adapting to vision loss.

L. K. Nisco & E. Midlarsky. Center for Lifespan and Aging Studies, Teachers College, Columbia University, New York, NY 10027. Attachment style and well-being of daughters who are caregivers.

C .L. M. Keyes, Sociology and School of Public Health, Emory University, Atlanta, GA 30322. The role and connection of socially responsible behaviors with well-being throughout adulthood.

Discussant:

B. Silverstone, The Lighthouse Inc., 111 East 59th Street, New York, NY 10022.

Well-being in later life depends upon many aspects of an individual's resources, including psychological resiliency, available social supports, changes in social roles, and coping with disability or other losses. This symposium will explore these various facets that constitute well-being in later life in these various social and psychological domains in order to gain a more holistic understanding of the dynamics affecting quality of life in old age. Using a national sample of adults from 25 to 74 years, the first paper will explore the relationships between age and well-being, and how this relationship is mediated by gender and marital status and the relation of these findings to recent lifespan theories of emotion. The second paper will present a qualitative analyses of self-reported coping among older adults with vision loss, and seek support for theories that posit the development of novel coping strategies as means of restoring equilibrium to the lifespace and regaining a sense of well-being. In the third paper, data will be presented showing a link between caregiver burden and depression with the attachment styles of daughters caring for an older mother. The last paper will discuss the relationship between socially responsible behaviors throughout adulthood, and how opportunities for such activity may be limited with increasing age. Our discussion will weave these various threads together to gain a better understanding of the context of well-being in later life.

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ENVIRONMENTAL MEASUREMENT IN AGING RESEARCH.

B. R. Connell, Rehab R&D Center on Aging, Atlanta VA Medical Center, Decatur, GA 30033

Participants:

B. R. Connell, (Rehab R&D Center on Aging, Atlanta VA Medical Center, Decatur, GA) Measuring Ambient and Architectural Conditions in Aging Research.

L. N. Gitlin, M. Corcoran, L. Winter, S. Schinfeld (Thomas Jefferson University, Philadelphia, PA, George Washington University, Washington, DC) Conceptual and Methodological Challenges of Assessing the Home Environment of Dementia Patients.

P. D. Sloane, S. I. Zimmerman, C. M. Mitchell (Institute on Aging and Department of Family Medicine, University of North Carolina at Chapel Hill, Cecil B. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill) Do the Determinants of Quality Vary by Site?

M. Calkins, R. Meehan, E. Lipstreuer (I.D.E.A.S., Inc., Cleveland, OH) Methodological Considerations for the Future of Environment-behavior Research in Aging

Discussant:

P. Lawton, (Philadelphia Geriatric Center, Philadelphia, PA)

There is growing interest in the contributions of the physical environment to the behavior, functioning, and well-being of older people in community and congregate settings, including the role of inappropriate environmental conditions as a source of excess disability and the use of supportive environments as part of intervention strategies to maximize overall functioning. However, the development of methods and measures for characterizing environmental variables is in its infancy. Although advances have been made in environmental measurement, further efforts are needed to ensure the availability of conceptually- and scientifically-sound measures. The overall goal of this session is to provide information about available environmental measures as well as to draw attention to the need for additional work in this area. Participants will present examples of existing measures and address 5 questions key to further developments -- 1) what environmental factors need to be measured; 2) what instruments, strategies, and procedures exit for measuring them; 3) what are the challenges of measurement in specific setting types (e.g., residential housing, LTC); 4) are there different challenges for measurement across setting types (e.g., are or in what ways are there different issues/challenges in housing vs LTC); and 5) are there different measurement issues for environmentally-oriented aging research (e.g., assessing the effect of going outdoors for SCU residents on sleep, disruptive behaviors, conditioning) vs design-oriented, often facility-specific studies (e.g., evaluating the appropriateness of a SCU's outdoor space as a basis for planning a renovation of the space)? Presentations will largely draw on research related to dementia and settings serving individuals with dementia. Generalizability to other populations and settings will be discussed.

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GRANDPARENTS RAISING GRANDCHILDREN: PHYSICAL HEALTH, MENTAL HEALTH, AND ECONOMIC HEALTH. R. Pruchno, Center on Aging, Bradley University, Peoria, IL 61625.

Participants:

Marlene Stum & Monica Frazer (University of Minnesota, St. Paul, MN) Economic issues facing grandparents raising grandchildren.

Carol M. Musil (Case Western Reserve University, Cleveland, OH) Grandmother caregivers: Changes in psychosical and self-assessed health after 10 months.

Frieda R. Butler (George Mason University, Fairfax, VA) African American grandparents parenting grandchildren: An exploratory study to assess health status, parental stress and social supports.

Rachel A. Pruchno & Julie H. Patrick (Bradley University, Peoria, IL) Grandmothers raising grandchildren: Experiences of Black and White families.

Discussants:

Maximiliane Szinovacz (Old Dominion University, Norfolk, VA)

Sidney Stahl (National Institute on Aging, Washington, DC)

Census data indicate that in 1996, 2.4 million U.S. households included a grandchild under the age of 18 and that 4.06 million grandchildren were living with a grandparent. Reasons for these shared living arrangements include drug and alcohol abuse as well as physical and emotional abuse or neglect on the part of the middle generation, teen-aged pregnancy, divorce, and poverty. Grandparents who take on the role of parent are faced with a host of challenges, including monitoring grandchildren with severe behavior problems, interacting with the school and formal service system, and relinquishing their own "golden years".

This symposium will document the costs to grandparent's physical health, mental health, and economic well-being that ensue when they become responsible for raising a grandchild. Results from studies conducted using qualitative and quantitative methodologies will be reviewed. Factors that have been identified as affecting well-being outcomes, including characteristics of grandchildren and of grandparents will be highlighted. Implications for interventions and policy change will be discussed as will the requisite focus for the next generation of research studies focusing on grandparents raising grandchildren.

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Prevalence of Dementia in Three Ethnic Groups:The South Florida Program on Aging and Health, 1993-1996.
Demirovic J, Prineas RJ, Lowenstein D, Bean JA, Duara R, Sevush S, Stitt F, Szapocznik J. University of Miami School of Medicine, Miami, FL, 33101

To determine the prevalence of cognitive impairment, all dementia (D) and Alzheimer's disease (AD) in a multi-ethnic community, we examined a population sample of 2,759 elderly ($\geq$ 65 yrs) African American (AA), Hispanic-Cuban (C) and white non-Hispanic (WNH) men and women of Dade County, Florida. The Short Portable Mental Status Questionnaire (SPMSQ) was used as a screening test. The prevalence of cognitive impairment was for AA men 17.0%, AA women 16.7%, C men 9.4%, C women 11.4%, WNH men 9.0% and WNH women 8.5%. Participants with cognitive impairment (SPMSQ cutpoints took account of race and education) were referred to two Memory Disorders Clinics for diagnosis of D / AD. Prevalence rates of D / AD were adjusted for sensitivity and specificity of the SPMSQ in each sex /ethnic group. The rates of D among AA men (20.9%) were almost two times greater than the rates among WNH men (11.6%). WNH and C women had similar prevalence rates of D (WNH women 12.1% , C women 12.9%). Low SPMSQ specificity for C men and AA women gave unstable D rates. Overall, more than two thirds of all D cases had AD. Age (p=0.0001), family history of AD (p=0.02) and AA (p=0.0001) or C (p=0.006) ethnic group were directly and independently associated with the prevalence of AD. These results warrant future prospective studies to explain the role of ethnicity and related risk factors in the incidence of D / AD.

Clinically Meaningful Cognitive Change in Mild AD.

S. Sawrie, D. Marson, T. Stalvey, F. Jamil, L. Harrell, Dept. of Neurology, University of Alabama at Birmingham, Birmingham, AL 35233

A weakness of existing longitudinal studies of cognitive decline in AD is their reliance on group-level, repeated-measures designs that obscure the individual heterogeneity of clinically meaningful change. Furthermore, studies typically do not control for test-retest confounds such as practice effect, regression-to-the-mean, and normal cognitive aging. A new standardized regression-based (SRB) statistical methodology has been developed recently that permits evaluation of clinically significant cognitive change at the group and individual level while controlling for these test-retest confounds. The present study utilized this SRB approach to examine clinically meaningful cognitive change in a sample of 53 patients diagnosed with possible or probable mild AD (CDR = 1.0) (NINCDS-ADRDA criteria). Each subject underwent comprehensive neuropsychological testing at baseline and approximately one year later. SRB change scores were computed for each subject on 11 cognitive measures from four cognitive domains. Mean SRB change scores were computed by measure. Base rates of decline were also calculated for each measure using the SRB change score of -1.64 ($p < .05$) as a cutoff. Mean SRB change scores revealed clinically significant declines on measures of verbal memory savings score, confrontation naming, verbal conceptualization, and mental flexibility. Base rates of significant cognitive decline on these measures ranged from 92.5% to 48.1%. The sample as a group did not demonstrate clinically significant decline on measures of immediate and delayed verbal memory, phonemic and semantic verbal fluency, and attention. However, base rates of significant decline on these measures ranged from 47.2% to 17.4%. These data suggest that the typical pattern of clinically meaningful cognitive change over a one year period in mild AD is characterized by declines in semantic memory, verbal memory savings score, and executive function. However, base rate analyses suggest that there is still a great deal of individual heterogeneity in this pattern.

Behavioral syndromes in Alzheimer's disease (AD): description and correlates.

A.Bianchetti*§, L.Rozzini*§, G.B.Frisoni*§, A.Gozzetti§, G.Albertini*, T.Metitieri*, O.Zanetti*§, M.Trabucchi*§, and J.L.Cummings#.
Alzheimer Unit, IRCCS S.Giovanni di Dio Fatebenefratelli and §Geriatric Research Group, Brescia, Italy, #Dept Neurol Psychiat Biobehav Sci, UCLA Sch Med, Los Angeles, CA.

This study is aimed to assess whether behavioral syndromes can be identified in AD. Subjects were 162 consecutive patients with probable AD admitted to our dementia unit. Age was 76.4±8.5 years, females were 74.1%, and MMSE was 13.3±6.9. Behavioral disturbances were assessed by UCLA NeuroPsychiatric Inventory (NPI). Factor analysis was carried out on NPI subscales, leading to identify three factors, accounting for 62.5% of the total variance. NPI subscales of anxiety and depression loaded on the first factor, which was defined as "mood". Agitation, hallucinations, delusions and irritability loaded on the second ("psychotic") and disinhibition and euphoria loaded on the third ("frontal") factor. Patients with high scores on the "mood", "psychotic", and "frontal" factors were 23, 20, and 14, respectively. Importantly, most of these patients had high scores on only one factor. Patients with the "psychotic" syndrome were older, had older age at dementia onset, had poorer cognition, were more often males, and had faster rate of dementia progression. Patients with the "frontal" syndrome had higher education, longer disease duration, and slower rate of progression. We conclude that some combinations of behavioral disturbances occur more frequently together and have distinct clinical features and might represent separate behavioral syndromes with different etiologies.

GENDER DIFFERENCES IN THE RELATION BETWEEN COMORBIDITY AND MORTALITY IN ALZHEIMER'S DISEASE PATIENTS

G. Gambassi, K. Lapane, F. Landi, A. Sgadari, V. Mor, R. Bernabei, & SAGE Study Group. Center for Gerontology and Health Care Research, Brown University, Providence, RI 02912, and Cattedra di Geriatria, Università Cattolica del Sacro Cuore, Largo A. Gemelli 8, 00168 Rome, Italy.

Prevalence and incidence of Alzheimer's disease (AD) are higher among women, and they tend to have more severe cognitive impairment. Yet, men exhibit a greatly increased risk of death. We investigated the role of gender in the relation between comorbidity and mortality among 24,074 AD patients aged 65+ years. We used the SAGE database which includes 350+ clinical items (collected with the Minimum Data Set) on all residents admitted to ~1,500 facilities in 5 U.S. states, between 1992-1995. Prevalence of comorbid conditions was estimated by logistic regression models adjusting for age, race and the level of cognitive impairment. Data on death was via linkage with Medicare claims files. Age- and race-adjusted 1-yr mortality rate was 17% for women and 31% for men. Women (n=17,918) were significantly older than men (83±7 vs 81±7 years), 26% had an extremely severe cognitive deterioration (19% among men). Indices of physical disability did not differ but for malnutrition (more prevalent among women). At any level of cognitive impairment, the adjusted prevalence of arrhythmia, Parkinson's disease, COPD, cancer was higher among men. Only arthritis and hypothyroidism were more prevalent among women. As indirect evidence of being possibly healthier, women received fewer medications for each given disease, and they were significantly less likely to have hospital admissions. Reduced mortality among women with AD may be due to fewer comorbid conditions relative to men.

BEHAVIORAL SYMPTOMS IN ALZHEIMER'S DISEASE: A LONGITUDINAL ANALYSIS.

W.E. Haley, D.L. Roth, H.J. McCarty, J.E. Owen, & K.T. Goode, Department of Gerontology, University of South Florida, Tampa, FL 33620 and Department of

Psychology, University of Alabama at Birmingham, Birmingham, AL.

Behavioral problems are among the most stressful symptoms for caregivers of patients with Alzheimer's disease (AD). Behavioral problems are also important in predicting caregiver depression and institutionalization of the AD patient. These symptoms are often assumed to increase steadily as dementia worsens, but there have been few longitudinal studies of behavioral symptoms. In the present study, caregivers of 150 AD patients were interviewed initially, and for two subsequent years, concerning the occurrence of ADL and IADL impairments, as well as memory and behavioral problems. Cross-sectional and longitudinal analyses suggest that behavioral problem factors of general cognitive disturbance, behavioral disturbance, apathy, and forgetful behaviors progress differently with increasing severity of dementia. In addition, these factors were found to peak at different levels of dementia severity. Results suggest that behavioral symptoms in AD should be viewed as multidimensional and having varied courses of progression.

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AMERICANS' ATTITUDES TOWARD AGE-BASED POLICIES IN THE 1990s. M. Silverstein, J.J. Angelelli, Andrus Gerontology Center, University of Southern California, Los Angeles, CA 90089-0191.

The purpose of this study was to analyze changes in Americans' attitudes toward public policies for the elderly in the 1990s. Data were used from the 1990 and 1997 Survey of Intergenerational Linkages, two nationally representative samples of 1500 Americans age 18 and over. The survey instruments were comparable at each panel, allowing the use of repeated time series methods to analyze change in public opinions. The aim of this analysis was to assess whether cohort replacement and the aging of cohorts between 1990 and 1997 resulted in more negative or more positive attitudes toward entitlement programs and public benefits to the elderly. Of particular interest was whether a greater degree of opposition to age-based policies manifested by the 18-24 year old cohort in 1990 persisted both in the same cohort over time and in the subsequent cohort of 18-24 year olds in 1997. The findings suggest that, overall, Americans' attitudes toward age-based policies have become more hostile in the seven year period between 1990 and 1997. However, there appears to be a liberalizing effect of aging, as the cohort which was 18-24 years old in 1990 became more favorable toward public policies for the elderly by 1997, as they aged into the 25-31 age group. The findings suggest that both cohort and aging effects need to be distinguished when assessing support and opposition to public entitlement programs that serve the elderly.

WEALTH HOLDINGS OF THE NEW OLD AND HOW THEY CHANGED IN THE 1990s: RESULTS FROM THE HEALTH AND RETIREMENT STUDY. R.V. Burkhauser and R.W. Weathers, Department of Policy Analysis and Management, Cornell University, N134 MVR Hall, Ithaca, NY 14853-4401, and Center for Policy Research, Syracuse University, Syracuse, NY.

This paper will use three waves of data from the Health and Retirement Study (HRS) to look at the distribution of wealth among the new old—men and women aged 51 to 61 in 1992—and how it changed between 1992 and 1996. The richness of the HRS data allow us to define wealth quite broadly. In addition to traditional sources of wealth—stocks, bond, IRAs, Keogh plans, rental and business property—we also include housing wealth, employer pension wealth, and Social Security wealth.

We find that lower wealth quintiles hold a smaller share of wealth than higher wealth quintiles, disproportionately hold their wealth in the form of Social Security annuities, and are less likely to provide wealth transfer to their children. Furthermore, we find that lower wealth quintiles have been least helped by the dramatic growth in stock market prices in the 1990s and will be most affected by plans to reduce future Social security benefits unless such plans specifically address this issue.

Marital Dissolution, Remarriage, and Pre-Retirement Wealth. Janet M. Wilmoth, Department of Sociology and Anthropology, Purdue University, 1365 Stone Hall, West Lafayette, IN 47907.

An emerging body of research indicates that economic outcomes among pre-retirement age adults can be attributed to the timing of marital events during the life course. This previous research has shown that a marital dissolution during young adulthood has a greater effect on wealth than one occurring later in the life course and that remarriage can offset this negative effect. However, this research has not fully explored how the timing of remarriage influences later life wealth outcomes. The purpose of this paper is to use data from the 1992 Health and Retirement Study to identify how the offsetting effect of remarriage varies by 1) the timing of the remarriage and 2) the type of dissolution event (i.e. divorce or widowhood). The results indicate that remarriage earlier in the life course has a greater offsetting effect than remarriage that occurs later. The length of time between a marital dissolution and a remarriage is negatively related to wealth. In addition, remarriage appears to be similarly beneficial to divorced and widowed individuals.

HEALTH, WEALTH AND THE FINANCIAL SATISFACTION OF MEN AND WOMEN LIVING ALONE: RESULTS FROM THE FIRST WAVE OF THE HRS PANEL STUDY.

N.L. Danigelis & B.R. McIntosh, U. of Vermont, Burlington, VT 05405.

Because little is known about the financial satisfaction of vulnerable populations (George, 1992), this paper examines predictors of the financial satisfaction of unmarried men and women living alone. Data from a weighted subsample of the 1992 Health and Retirement Study (HRS) are used to describe the effects of several monetary and non-monetary factors on the financial satisfaction of 430 unmarried men and 997 unmarried women, aged 51-61, who were living alone at the time of their interview.

OLS regressions for the total subsample of 1,427 and comparisons of unstandardized regression effects between men and women highlight both the overall importance of self-rated health and the differential salience of net liquid assets and total income for men and women. Specific findings include: (1) For the entire subsample, health is twice as important and self-rated disability equally as important as assets in predicting financial satisfaction. Income, while significant, is of less importance. (2) For men, health and assets are most important, followed by employment. Income is non-significant. (3) For women, health is most important, followed at a distance by self-defined disability and assets. Results have implications for George's (1993) use of equity theory and Calasanti's (1996) views on the meaning of gender diversity.

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CONTACT, COMPARATIVE LIFE-SATISFACTION, HEALTH, AND CHILDLESSNESS AS CORRELATES OF LONELINESS IN MIDDLETOWN, U.S.A.

Ione Y. DeOllos, Ph.D. & David C. Morris, Ph.D., Department of Sociology. Research Associates: Centers for Gerontology & Middletown Studies, Ball State University, Muncie, IN 47306.

Atchley (1997) observes that while the number of offspring has a significant effect on the parent-child relationship, it is axiomatic those with no living children cannot rely upon that relationship in any way. Negative stereotypes and self-perceptions have been related to voluntary childlessness (Somers, 1993). Research indicates that parents perceive, among other characteristics, the childless to be selfish, materialistic, unfulfilled, lonely in old age, less happy, and less well-adjusted (Callan, 1983). Moreover, childlessness has been seen as contributing to social isolation (Soldo, 1990). Social isolation may, in turn, result in loneliness which Butler et al. (1991) define as the fear of emotional isolation and having no one with whom to relate.

This study focuses on examination of the levels of loneliness expressed by 400 randomly-selected older adults (ages 60 to 97). The research (telephone interviews) was conducted within the classic community setting of the Lynds' "Middletown" (Muncie, Indiana).

Almost 53 percent are married; about 36 percent are widowed. Some 16 percent of the sample have never had or have no living children. In general, a majority of older Middletowners see themselves as being in relatively good health, active, and satisfied with their lives and financial resources. About 41 percent state that they are *Always*, *Very Often*, *Frequently*, or *Sometimes* lonely.

Multiple regression analysis of 14 variables on LONELINESS yields an $R=.5346$ ($R^2=.2858$). Six variables (AMOUNT OF SOCIAL CONTACT, COMPARATIVE LIFE-SATISFACTION, MARITAL STATUS, HEALTH STATUS, NUMBER OF LIVING CHILDREN, AND EDUCATION) account for most of the variation in LONELINESS ($R=.5060$; $R^2=.2568$). Path models have been developed to explore the more complex interrelationships between LONELINESS and the independent variables.

IMPACT OF DIVORCE ON GRANDPARENT-GRANDCHILD RELATIONSHIP IN BRITAIN

L.M. Drew & P.K. Smith, Department of Psychology, Goldsmiths College, University of London, New Cross, London, SE14 6NW, UK.

86 members of the Grandparents Federation in Britain returned questionnaires about changes in contact with their grandchildren following parental divorce. Three questionnaire measures of the grandparent-grandchild relationship, proximity, contact frequency, and emotional involvement, were inter-related and a significant decrease was reported after parental divorce. There were no significant differences on these measures between grandparents all of whose grandchildren were affected by parental divorce, and grandparents for whom only some grandchildren were so affected; but the latter group did show a greater decline in emotional involvement and also had less recourse to legal action to sustain contact. With grandchildren affected by parental divorce, proximity to grandparents was not significantly less than for grandchildren not so affected, but contact and emotional involvement were significantly less. 79% of grandparents reported emotional and physical health problems related to the loss of contact. Results are discussed in terms of the extent to which grandparents are victims of the divorce situation, or agents involved in cross-generational family dysfunction; the victim model appears to get more support from our data. Recommendations are made for further research, as well as counselling to help move grandparents through the grief process and to a better quality of life.

SANDWICHED MARRIAGES: PARENT-CHILD HELP AND MIDLIFE MARITAL QUALITY

R. Ward & G. Spitze, Dept. of Sociology, SUNY at Albany, Albany, NY 12222.

Well-being of the "sandwich generation" is presumed to be affected by burdens of assistance to both children and parents. This may affect quality of marital relations, embedded in other family roles. Interconnected family ties may be more salient for women. Effects of intergenerational involvement on marital quality are analyzed for 2,129 married persons aged 40-59 in the Nat'l Survey of Families and Households. Being a parent and/or child is common, though variable by age. Most report helping adult children; help to parents is less common and declines with age; helping both at the same time is unusual. Help to children and parents, separately or combined, has little association with reported marital quality for either women or men, though quality of relations with children and parents is more consistently related to marital quality. Generally high marital satisfaction in midlife appears to be sustained in the face of typical, occasional intergenerational exchanges. These may be more easily integrated into the lives of individuals and couples than caregiving.

THE FAMILY AND COMMUNITY LIFE OF OLDER PEOPLE: HOUSEHOLD STRUCTURES AND SOCIAL NETWORKS IN THREE URBAN AREAS OF BRITAIN

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This paper explores data on the household structures and social networks of older people living in three urban areas of the UK. The localities studied -Bethnal Green, Woodford and Wolverhampton- were the subject of major social research in the 1940s and 1950s. The Keele research has revisited these areas to examine changes in the family and community relationships of older people. The paper will consider three main issues arising from the findings from the study: First, care and support for older people has become even more focused around the immediate family, but without (in many cases) the advantage of geographical proximity for the management of care and support tasks. A second important finding, however, is that localities vary in terms of whether they help or hinder the development of support networks. The evidence will also suggest that inner-city environments can generate major obstacles to the maintenance of support, with problems of racism and poverty playing a significant role. Third, the paper will consider the implications of the research for developing an urban sociology of ageing. The majority of older people live in urban environments and the implications of this need to be more clearly acknowledged within gerontology.

MEASURING ADULT ATTACHMENT: A PSYCHOMETRIC ANALYSIS OF THREE INSTRUMENTS.

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Attachment theory may be a useful framework for conceptualizing adult relationships in late life, but how best to measure adult attachment remains a question. In this study comparisons were made between three self-report instruments used to measure adult attachment: the Adult Attachment Scale (AAS), the Relationship Questionnaire (RQ), and the Attachment Style Questionnaire (ASQ).

Analysis of the individual scales revealed fair to good internal consistency (coefficient alpha ranged from .64 to .95) and subscale intercorrelations significant and in expected directions. Convergent validity correlations were higher between the AAS and RQ subscales (*r*'s ranged from .19 to [illegible]0) than between the AAS and ASQ subscales (*r*'s .06 to .19) and between the RQ and ASQ subscales (*r*'s .01 to .23).

An initial principal components analysis suggested three factors among the instruments, separating the AAS and RQ from the ASQ. A subsequent principal components analysis on the first two scales suggested two factors that correspond to Bartholomew's adult attachment dimensions: Anxiety and Availability. Recommendations are offered regarding which of these self-report instruments might provide the most reliable and valid assessment of adult attachment between adult children and their older parents.

RESIDENTIAL PROPINQUITY OF CHILDREN OF OLDER ADULTS IN RURAL NORTH CAROLINA.

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Older adults use formal and informal support networks to manage nutritional and health needs. Formal services in rural communities are often limited, so informal support, especially that provided by adult children, plays a critical role. The residential propinquity of adult children may facilitate informal support, yet the prevalence of propinquity of adult children to their parents and its role in informal support is not well described. Data come from a three-year study designed to understand various aspects of nutritional self-management among community-dwelling elders in two rural counties in eastern North Carolina. In-depth interviews were conducted with 145 African-, European-, and Native-American elders (age 70 and older). Interviews were tape recorded, transcribed and analyzed using a systematic, computer-assisted text analysis procedure. Of those elders who had living children (N=123), 34% had at least one child or grandchild living within a short distance of their home, and 15% had more than one living within a short distance of their home. Many of these children live on property given to them or purchased from their parents. These data indicate a strong network of kin, particularly adult children and grandchildren, who can provide immediate emotional and instrumental assistance to older adults in rural areas. Supported by NIA Grant #R01-AG13469.

HOW DO GRANDPARENTS WHO PARENT THEIR GRANDCHILDREN DIFFER FROM THOSE WHO DO NOT?: EVIDENCE FROM A NATIONAL SURVEY.

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Increasing numbers of grandparents are raising their grandchildren because of problems within the parental generation such as drug and alcohol addiction, AIDS, divorce, and unemployment. Yet little is known about how grandparents who "parent" their grandchildren differ from those who do not. Most previous research on grandparent caregiving has been based on non-representative samples or samples which do not allow comparisons of these two groups. The purpose of this research is to use data from a nationally representative study of grandparents in order to compare characteristics of grandparents who have *ever* raised at least one grandchild (for six months or more) to those who have *never* raised a grandchild. The data come from the Study of Intergenerational Linkages II, a 1997 national sample of 2,000 individuals, including an oversample of 500 grandparents. Differences in demographic and attitudinal characteristics of both groups of grandparents were examined. The results revealed that compared to grandparents who have never raised a grandchild, those who have ever raised a grandchild are more likely to be female, younger, African-American or Hispanic, of lower income, and have a greater number of grandchildren as well as a higher evaluation of themselves as grandparents. The implication of these findings for services to grandparent caregivers are discussed.

WHEN BEING A BROTHER OR SISTER IS IMPORTANT TO ONE'S IDENTITY: LIFE STAGE DIFFERENCES.

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Role theory suggests that the identity of individuals is largely based on the roles they play during the different stages of their life. One role which may differentially contribute to an individual's sense of self throughout life is the sibling role--since the opportunity structure for enacting the role is greatest during the early and late stages of adulthood (when there are fewer institutional roles to be played). In addition, the opportunity structure for enacting the sibling role is influenced by the number of siblings and their need for emotional or instrumental help and support. Using data from the 1994 wave of the USC Longitudinal Study of Generations, we examine the extent to which opportunity structure predicts the salience of the sibling role at different life stages. The subsample for this analysis consisted of men and women ranging in age from 16-99 who had at least one living sibling. The results revealed support for the hypotheses. A curvilinear relationship was found between the salience of the sibling role and stage of life, i.e., being a brother or sister was more important to an individual's sense of self during early and late stages of adulthood than during middle stages. Further, females found the sister role to be more important to their identity than males found the brother role to be, regardless of the gender of their sibling. Finally, the provision of emotional support, but not instrumental support, also contributed to the salience of the sibling role.

THE FAMILY CONTEXT OF AGING: A LONGITUDINAL INVESTIGATION.

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Using unique models of interfamilial differences in intrafamilial variability, examined longitudinal predictors of support between 2,343 older parents ($M_{Age} = 67.7$ years) and each of their 7,009 adult children ($M_{Age} = 45.4$ years). Three models were fit to examine the importance of past patterns of exchange, child characteristics, and relationship qualities. Relevant parent characteristics were controlled. Models provided a good fit with observed data, and explained variability both within and between families. Dependent variables included parental provision and receipt of instrumental and emotional support with adult children. Theoretical and substantive elaborations on previous research are reported. For instance, longitudinal patterns of intergenerational assistance suggest considerable continuity, with modest evidence for long-term reciprocity; daughters are more involved in all forms of support except giving instrumental assistance; relationship quality is important except for instrumental support to children; Hispanics give less instrumental support to children, but are otherwise more involved in intergenerational support. Results are interpreted with regard to a contingent exchange perspective, and promising future extensions discussed. Examples of how these models may be applied to complex longitudinal family data are demonstrated.

MIDDLE AGE AND OLDER WOMEN'S LIFE COURSE EXPERIENCES WITH FAMILY VIOLENCE.

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Research on domestic violence highlights the vulnerability of children, young women, and frail elders to multiple kinds of abuse within family systems. Experiences with violence that occur post young adulthood and prior to late life, and the impact of earlier abuse on development during these middle years is less well understood. The purpose of this study was to explore how violence touches the lives of women age 40 and over. Semi-structured, face-to-face interviews were conducted with 31 women, ages 40 to 68, participating in a community health screening program. Eighty percent of the women interviewed reported experiences with physical and/or sexual abuse in their family lives. For most women (60%), such violence was experienced directly from fathers, husbands, boyfriends, or X-spouses. Twenty percent of the interviewees spoke of sisters, daughters, and granddaughters involved in abusive relationships. By late middle age most women had ended the violence in their lives by leaving the abuser, though sometimes this separation process took years to accomplish. Patterns of family violence across generations, the relationship of substance abuse to violent episodes, and the connection between verbal and physical abuse emerged as important themes.

MY MOTHER'S KEEPER: LIVING PATTERNS OF THE ELDERLY IN THE GWEMBE VALLEY, ZAMBIA

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The domestic setting is the locus of fundamental social and material reproductive activity, especially in subsistence societies. For the elderly in these societies, residential arrangements fundamentally influence their well being because of the redistribution of resources that occurs in the domestic unit. This paper examines the critical issue of living patterns for the elderly in the Gwembe Valley of Zambia. The data come from a longitudinal anthropological research project (Gwembe Tonga Research Project), and 18 months of ethnographic research in two villages. The paper reveals the role elderly individuals play in negotiating their needs with kin through residential arrangements and domestic settings. Children and other relatives alternately facilitate and resist their elders' efforts to mobilize support. Gender differences in living preferences suggest that men try to maximize control over resources and dependents throughout their lives, while aging women cultivate closer relationships to sons and brothers, and distance themselves from husbands. The findings suggest that support for the elderly depends more on individual strategies than on cultural, normative or altruistic notions of support.

Perceptions of Adult Daughters' of their Relationships with their Older Mothers and Fathers Joyce M. Mercier, Mack C. Shelley, II, Depts. of Human Development & Family Studies, Political Science, and Statistics, Iowa State University, Ames, IA 50011, Lori S. Paulson, Wellmark, Des Moines, IA 50319.

Perceptions of adult daughters engaged in multiple roles, are investigated as to their relationships with each parent. Parallel models of quality of relationship for the dyads, i.e., mother-daughter (M-D) and father-daughter (F-D) were examined using Structural Equation Modeling. For the 87 M-D dyads, mothers' marital status and daughters' level of filial obligation directly affected quality of relationship. In the 70 F-D dyads, daughters' reported quality of relationship was positively influenced by how much her father relies on her in decision-making, and her level of filial obligation. Fathers' health and daughters' education are also significant predictors of quality of the paternal relationship. How responsible the daughter feels for the care of her parents is important to the quality of relationship that they both experience.

Obligations in Older Stepfamilies

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The purpose of this study was to develop a grounded theory of intergenerational obligations in older stepfamilies. Twenty older remarried adults with at least one adult stepchild (AS) were interviewed about their beliefs about what AS should do for elder stepparents (ES). In addition, we examined processes of intergenerational support and assistance between AS and ES. Grounded theory methodology (GTM) was used to analyze data. In addition to analyzing audio transcripts, field notes were coded and analyzed. Beliefs about responsibility to lend assistance were examined within the context of familial and personal constraints, and what AS did to assist ES was contrasted with beliefs about intergenerational obligations. Implications of these findings for practitioners and policy makers will be discussed.

DISTRESSED PARENTS AND HAPPY CHILDLESS: THE CONDITIONAL EFFECTS OF PARENTAL STATUS ON WELL-BEING. T. Koropeckyj-Cox, Population Studies Ctr, University of Pennsylvania, 3718 Locust Walk, Philadelphia, PA 19104-6298.

Most research does not support the public perception that childless elders are more lonely or depressed than parents. However, Connidis and McMullin's (1993) Canadian study suggests that the quality of parent-child relations and whether childlessness is perceived as resulting from choice or circumstance shape the effects of parental status on well-being.

This paper refines and tests this parental status typology using data on adults aged 50-84 from the National Survey of Families and Households (1988, 1993). Parents are split by whether they report at least one excellent parent-child relationship (compared to none) and whether they report at least one poor relationship (compared to none). Childless adults are split by their attitudes about childlessness: incongruence is defined as childless persons who report that it is better to have a child than to remain childless.

Results indicate that parents with poorer quality parent-child relations are significantly more lonely and depressed than parents with better relations. Among the childless, incongruent attitudes predict greater distress for women (but not men), compared to all parents and compared to parents with good parent-child relations. The results and parental status typology are discussed in terms of the conditional benefits of parenthood and the role of discrepancies and self-evaluations in shaping well-being.

NETWORKS OF SOCIAL SUPPORT AND RECIPROCITIY: ELDERLY CUBANS AND THEIR CUBAN AMERICAN KIN.
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Ethnographic field work and in-depth interviews were used in examining networks of social support between elderly Cubans on the island and their kin in the United States. A total of 34 families participated in the study. At least one member of each family was interviewed in the United States and one member of the same family was interviewed in Cuba. Although the study aimed at establishing 34 dyads, it became possible, for most families, to interview at least one additional member. Hence, the study consists of 92 participants interviewed over a 2-year time interval. Bengston et al model's of family support provided the theoretical framework. Contrary to theoretical expectations, physical proximity and frequency of contact, were not determinants of kin instrumental support. Earlier family ties, established during childhood and adolescence, were the major and most important factors in explaining instrumental and emotional support over time, for some as many as 38 years, and space.

THE NATURE OF SUCCESSFUL INTERGENERATIONAL PROGRAMS AND THEIR REPLICATION

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An emerging core of research in lifespan human development, family relationships, and adulthood/aging increasingly points to the connection between intergenerational programs (e.g. foster grandparents) and the resolution of a broad range of social problems confronting children, youth, and families. The research project reported herein involves three intergenerational programs in a community near Detroit, Michigan. (1) *Grandparents Raising Grandkids*- support through a quasi-support group context for older adults (mostly over age 60) who have taken on responsibility for one or more of their grandchildren. (2) *The M.O.M.M.Y. Project*- volunteer mentoring for high school girls who are pregnant or are already rearing a child. (3) *Teens to Grandfolks*- provides volunteer support from teen-aged youth to elderly people who are isolated, and/or cannot completely care for themselves and/or their dwellings. This paper will address the following dimensions of such intergenerational programs: (1) the dynamics of specific programs which lead to greater personal and community productivity; (2) the development of a framework for comparing relative program contributions to personal and community productivity in different intergenerational programs; and (3) the analysis of the process of intergenerational program replication in different contexts. Ongoing work has led to several formative conclusions: (1) program replication is not a universal process but is an evolutionary one specific to individual programs, contexts, and community participants; and (2) research on program replication can provide both scientific information on community process and appropriate practical guidance for communities.

The Meaning of Grandparenthood And Its Relation to Subjective Well-Being

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In 1900 less than 25% of born children had all four grandparents alive, by the end of our century over 67% of children born will have all their grandparents alive. Multigenerational families are becoming more common and grandparents, parents, and grandchildren may, therefore, share many years of common experience. The research on grandparenthood, though, is not extensive. Thus, a research proposal was developed to examine the relationship among aspects of the grandparent role and the subjective well-being of grandparents and grandchildren, as assessed by three generations, using the paradigm of intergenerational relationships as the conceptual framework. A pilot study was conducted to obtain preliminary data and to validate several of the instruments in their Hebrew version. The study included a convenience sample of 51 three generational families, interviewed at home. Measures included: Dependent variable - Subjective well-being examined by: (1) Psychological well-being, assessed by the Zung and Durham Depression Scale (DS); (2) Physical well-being assessed by a self-reported item. The independent variable, included the meaning of Grandparenthood measured by The Hurme Grandparents Role Interview (GR) Family structure was assessed by household composition and place of residence. SES characteristics included gender, age, marital status, racial group, employment, education, immigration year and religious affiliation. Also, data was obtained on the age at which a person became a grandparent, number of children and grandchildren. The grandparents' age averaged 69.8, the majority were female and had an average of 4.2 children and 8.8 grandchildren. The average age at which they became grandparents for the first time was 48.1. The parents' age averaged 43.9, with an average of 3.7 children and 6 had at least one grandchild. The grandchildren's age averaged 16.5. Grandparent role: Mean GRI scores were very similar for grandparents, parents and grandchildren - 2.7 (SD 0.3), 2.6 (SD 0.3) and 2.5 (SD 0.3) respectively. A modest positive association was found between mean GRI scores as reported by parents and grandchildren (r = .29, p = .04), and between the mean GRI scores and psychological well-being for grandparents (r = .28, p = .04); data indicates that determinants of grandparenthood, as assessed by grandparents, was associated with their age (r = .31, p = .05). No other statistically significant relationships were found. The data will form the basis for the broader proposal.

SOCIAL EXCHANGE ANTECEDENTS OF LATE AND EARLY DIVORCE

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Most research about the decision-making process of divorce has quite naturally scrutinized the young, for it is they who divorce most frequently. Older people do divorce, and it is likely that the phenomenon of "late divorce" will increase as the older population expands demographically and the social and economic constraints on divorce lessen. This study analyzes the causes, barriers and alternatives via social exchange theory from a comparative sample of persons who divorce after 20 years of marriage versus those who divorce within 10 years of marriage in a mid-sized southwestern city. Results indicate that causes of divorce and barriers to divorce for both populations are similar with certain exceptions as predicted by social exchange theory (e.g., greater material and economic investments experienced by longer-term marriages). Although the late sample perceived alternatives to marriage as less available to a greater degree than the early sample, the influence of "improved prospects for a happier future" as a salient alternative to marriage appears as a likely basis for long marrieds in overcoming the barriers and costs of divorce.

THE FACTORS ASSOCIATED WITH GRANDPARENTING ROLES OF OLDER RELOCATED ADULTS. C. H. Zwane, S. C. Moxley, & V. R. Kivett The Department of Human Development and Family Studies, The University of North Carolina at Greensboro, Greensboro, NC 27402-6170. The purpose of this study was to determine the primary grandparental roles perceived among older inmigrants; and to examine the relationship between these roles and opportunity structures, affectual solidarity, and normative solidarity. Statistics included frequencies, chi-square analysis, and one-way ANOVAs. The sample consisted of 308 older adults who had relocated since the age of 60. The majority reported approximately two grandchildren. Four predominate grandparental roles were observed: companionate, intimate, intimate/remote, and remote (interrater reliability = .90). The first hypothesis, there is a relationship between opportunity for role enactment and grandparent role type, was supported in part. Grandparents who had an aggregate of roles were more likely to live closer than those who had an intimate or a companionate type of role. The second hypothesis, affectual solidarity variables are associated with each grandparental role, was supported. Affect distinguished between grandparent's perception of their roles and those who did not perceive themselves in a role. Lastly, the third hypothesis, there was a relationship between normative solidarity and perceived grandparent roles, was not supported. Overall, perceived role was more a function of affection than socialization; and, in addition, an aggregate of roles was a function of proximity. Implications for these findings are presented. **AARP Andrus Foundation Supported.**

MARITAL PREDICTORS OF LABOR FORCE EXITS

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Research on the retirement transition has relied on an individualistic model that views retirement foremost as an outcome of individuals' own characteristics and experiences, especially health and economic factors. However, some earlier research demonstrates that spouses' labor force participation/retirement as well as family responsibilities also impinge on the retirement transition. This paper, relying on panel data from the National Survey of Families and Households (N=511 husbands and 268 wives who worked at time 1 and were aged 50-75 at time 1), further pursues the impact of spouse and/or marital factors on labor force exits. Logit regressions indicate that in addition to health and economic factors husbands' retirement is affected by their wives' employment status as well as health. For wives, spouses' employment, wives' relative income, division of household labor, as well as extent of marital disagreements at time 1 all play a role in the retirement transition process. These data suggest that husbands may leave the labor force to tend to ill wives, whereas wives in conflictual marriages tend to postpone retirement. Previous retirement by the spouse promotes labor force exits among both husbands and wives. These data further underline the need to consider marital factors and/or spouse characteristics in models of labor force exits.

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THE HEALTH STATUS OF OLDER WOMEN VETERANS: HOW ARE THEY DOING?

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Little is known about older women veterans who served during World War II. We compare the health status of women over age 65 to that of male veterans. Data are from the VA Women's Health Project which includes a randomly selected sample of women veterans (n=719) using VA ambulatory care in the Boston area and are collected by mailed survey (participation rate=66%). Health status is measured by the Short Form 36 (SF-36), developed in the Medical Outcomes Study. Eight scales measure physical functioning (PF), role limits physical (RP) pain (BP), health perceptions (GHP), role limits emotional (RE), energy (E/V) social function (SF) and mental health (MH). While older women score lower on every scale, the most dramatic difference is in role limitations due to emotional problems.

	Men	Women		Men	Women
PF	57.8	49.5	**RE**	65.8	24.2
RP	42.4	21.8	**E/V**	52.9	47.3
BP	61.0	51.7	**SF**	70.2	61.0
GHP	55.2	54.6	**MH**	72.9	67.0

LONGER LIFE IN BETTER HEALTH: EFFECTS OF IMPROVING FUNCTIONAL STATUS ON ACTIVE LIFE EXPECTANCY, LONG TERM CARE ELIGIBILITY, AND SOCIAL POLICY

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We study the effect of improved morbidity on life expectancy, active life expectancy, and eligibility for long term care services. Data from the 1984-1990 Longitudinal Study of Aging and microsimulation techniques are used to simulate functional status histories for a cohort of older men and women under various assumptions of improved health. The results show that stemming functional status decline produces more pronounced effects than improving recovery from functional status loss. We find that improving functional status benefits both women and men, with increases in total life expectancy and the proportion of life spent unimpaired, and a reduction in long term care service eligibility. Better health yields a larger reduction for women in the proportion eligible for long term care services than for men. Since our simulations conform with trends now observed in the population, we discuss our findings in the contexts of health care economics, public policy, and social change. We also propose policy options that promote reductions in functional status decline.

Perceptions of Patients' Functional Abilities: A Comparison of Ratings by Family Caregivers and Inpatient Respite Nursing Staff.

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The present study is a preliminary investigation comparing the perceptions of family caregivers and inpatient respite nursing staff about patients' functional abilities. Twenty-two family caregivers participating in an inpatient respite program were asked to rate their family members' functional abilities using the Katz Activities of Daily Living Scale (Katz, Ford, Moskowitz, Jackson, & Jaffee, 1963). Respite nursing staff completed the Katz for the same 22 patients. Caregiver and nursing ratings differed in 56% (n=12) of the cases. Where differences occurred, no consistent reporting bias emerged. That is, caregivers rated half (n=6) of the patients as more independent and half (n=6) of the patients as more dependent than nursing staff. Disagreement between family caregivers' and nurses' ratings most frequently occurred on the Katz item regarding dressing ability (n= 8) and occurred most infrequently on the Katz item regarding feeding ability (n=2). Clinical implications for understanding patients' levels of functional abilities will be discussed.

LOCUS OF CONTROL AND TREATMENT OF INCONTINENCE. J. L. Locher, K. L. Burgio, D. L. Roth, P. S. Goode. The primary purpose of this study was to explore whether locus of control (LOC) moderated the effect of different treatments for urinary incontinence. The secondary purpose was to assess whether changes in locus of control was mediated by the outcome of the different treatments. Participants in this study included 153 ambulatory, community-dwelling women (aged 55+) with persistent urge incontinence who were randomized to biofeedback-assisted behavioral training, treatment with oxybutynin chloride, or a control condition. Participants completed Levensen's Multidimensional LOC and Wallstons' Health LOC Scales at baseline and follow-up. Correlational analyses revealed that there were no effects for any of the baseline LOC measures on treatment outcomes for the three groups. One-way analysis of variance showed that the three groups differed in amount and direction of change on Levensen's Multidimensional LOC scale for chance (F=7.162, p=.001). The biofeedback group showed decreases in the chance scale at follow-up; while the drug group remained the same; and the control condition showed increases. Further, analysis of covariance revealed that change in Levensen's LOC chance scale was not influenced by the outcome of the treatment. In conclusion, baseline LOC does not predict which subjects will demonstrate improved control over continence. This study lends modest support to the assumption that the ability to exercise control over health-related outcomes may have positive psychological benefits by decreasing one's attribution of events to chance.

INTRALIMB COORDINATION DURING STAIR ASCENT: FALLERS AND NONFALLERS

K. Williams, D.L. Gill, L. Williams, B.J. Kim, Department of Exercise and Sport Science, University of North Carolina at Greensboro, 27402.

A robust coordinative relationship between leg segments during walking and stair climbing has been demonstrated for healthy participants across the life span. In this investigation we compared coordination patterns of healthy older women with and without a history of falls. Participants (M age=72.2 years) were videotaped as they climbed stairs at their preferred speed. Kinematic data were analyzed, including determining when one segment reversed in relation to the other. Fallers (n=8) and nonfallers (n=8) demonstrated the same number of shank segmental reversals on the thigh (M=3) and reversals of the thigh segment in relation to the shank (M=2). Spatially, thigh and shank reversals occurred similarly for both groups. A larger number of reversals of the distal, lower leg segment than the more proximal thigh suggests adaptations to small balance losses during stair climbing, and contrasts with overground walking. Similar patterns were observed previously in young participants, suggesting that the challenge of stair climbing results in modifications in coordination, regardless of age. At this "deep" level of coordination, task constraints appear to be more critical to performance than increased age.

DISABILITY OR DEPENDENCY? EFFECTS OF ADL MEASUREMENT SCALES ON DISABILITY PREVALENCE AMONG OLDER AMERICANS

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As the number of older Americans grows, policy makers will increasingly rely on estimates of functional status to determine the need for health services and to determine eligibility for services. Use of activities of daily living (ADLs) as functional status indicators is well established. There is much less consensus on measuring ADL disability. One definition of disability is based on difficulty performing an activity. A differing view defines disability as dependency, or as receiving or requiring help to perform an activity. Using the first wave of the AHEAD Survey, we construct four disability scales, ranging from difficulty to dependency. Measures used to construct the scales include the receipt of help, the frequency of assistance, and the degree of difficulty performing tasks. We examine the sensitivity of the scale used across various subgroups of older persons. Using differing scales alters disability prevalence dramatically. The difficulty scale produces disability estimates 3.6 times greater than the dependency scale, and classifies a substantially higher percentage of nonwhite, married, low income, and low education individuals as disabled. We discuss social policy and equity implications of using various scales to establish eligibility for long term care services.

Development of More Sensitive Performance-Based Measures of Functional Impairment Among the Elderly

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The Direct Assessment of Functional Status (DAFS) scale has been widely used as a diagnostic and clinical tool to evaluate a broad array of functional capacities in different geriatric outpatient populations. The instrument which has been translated into six different languages includes telling time, time orientation, using a telephone, preparing a letter for mailing, identification of traffic signs, identifying and counting currency, writing a check, balancing a checkbook and making change for a purchase. Eating as well as dressing/grooming subscales are also assessed. One concern regarding the DAFS and similar instruments is their relatively modest sensitivity to early functional changes in incipient and very mild cases of dementia.

In this study, we expanded upon the existing DAFS and developed more complex measures of functional capacity including medication management tasks, two meal preparation tasks, a telephone message paradigm and more sophisticated tests of higher order financial skills. Data from both an outpatient memory disorders clinic and the actual homes of patients of Cuban-American and white non-Hispanic elderly diagnosed with memory disorders demonstrated high reliability and validity of these measures. Differences between the two cultural/language groups were also observed using item analyses.

The implications of these data for better diagnosis and management of persons with suspected cognitive disorders and early dementia are discussed.

OLDER ADULTS' TEMPORALLY-FRAMED SUBJECTIVE EVALUATIONS.

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A body of social cognitive research has suggested that there are stability-maintaining processes which undergird the self-evaluations of aging adults. This study extended the examination of self-perception biases to self ratings of everyday functioning. Specifically, this study addressed the constituents of elders' subjective evaluations of functioning. The sample consisted of 187 older adults (mean age = 73 years; range = 53-92 years). Participants' subjective evaluations of their hearing, vision, and IADL functioning were assessed. Participants rated their performance in these domains from three perspectives: 1) current self evaluation; 2) comparison of current functioning to all-time best or prime performance; and 3) comparison of current functioning to possible future, or worst imagined performance. Following the subjective evaluations, objective assessments of hearing, vision, and IADL performance, as well as self-reported sense of control and concern about aging, were obtained.

Of the three subjective evaluations, only prime ratings, in all three domains, demonstrated a significant negative relationship with age (r's = -.20 to -.26, $p < .01$). Objective evaluations of vision and hearing were also negatively related to age ($r = -.18$, $p < .05$ and $r = -.45$, $p < .05$, respectively). For the domains of hearing ($R^2 = .43$, $p<.001$), vision ($R^2 = .42$, $p<.001$), and IADL functioning ($R^2 = .46$, $p<.001$), the prime, future, and objective ratings, as well as self-rated concern about aging and participant age, were significant predictors of current subjective ratings. The results suggest that temporally-framed self evaluations, particularly those which force comparisons to the past, may be more sensitive to age-related individual differences in objective functioning.

DETERMINANTS OF INDEPENDENCE FOR SENIORS WITH CHRONIC MUSCULO-SKELETAL DISABILITY

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The purpose of this research was to identify the determinants of perceived independence in 286 community-dwelling seniors with chronic musculo-skeletal disability. In face to face, structured interviews, we examined three domains of disability (Personal Care, In-Home and Community Mobility). We hypothesized that domain-specific perceptions of independence would be associated with level of disability in that domain, demographic factors, physical and social environment, illness and efficacy appraisals and the nature of the assistive relationship. We developed regression models for each domain. Perceptions of loss of Personal Care Independence were associated with gender, personal care disability, receiving assistance from another, having modified the home, and helplessness. Loss of In-home Mobility Independence was associated with age, gender, in-home mobility disability, receiving assistance from another and helplessness. Loss of Community Mobility Independence was associated with community mobility disability, receiving assistance from another, having had to restrict one's activity and helplessness. These findings suggest that although disability contributes to perceptions of independence, social and psychological factors also contribute in varying degrees. Further, objective measures of independence that focus on disability and dependence on others may not reflect the older person's subjective perceptions of their independence.

PREDICTORS OF ELDERLY WOMEN'S SELF REPORTED HEALTH STATUS

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Self reported health status has been used as a predictor of health care utilization. Persons reporting fair or poor health have shown higher expenditures for medical care. The purpose of this study was to estimate the impact of various predictors of self reported health status in an elderly population. The data are from a 1994 survey of women (N=885) age 55 or older (mean age: 66) participating in a questionnaire development study. The two highest categories of health were collapsed to form a binary dependent variable of 'very good or excellent health' or otherwise. The table below reports significant results of the logistic regression.

Independent Covariate	Odds Ratio	95% C. I.
Age	.972*	(.950, .994)
African American woman	.282**	(.111, .693)
Number medications	.890**	(.824, .962)
Number comorbidities	.887***	(.829, .949)
Completed college	1.663**	(1.184, 2.335)
Reports being 'active'	1.323*	(1.020, 1.717)
Walks for exercise	1.370**	(1.149, 1.633)
Drinks alcohol less than once/day	4.850**	(1.844, 12.755)

*** p<.001, ** p<.01, * p<.05

Significant covariates were evaluated both at the mean and at various thresholds (25th percentile, etc.) to detect which predictor had the greatest effect on health status. Results showed that being of African-American descent had the strongest effect on an elderly person's reporting very good or excellent health status.

THE BURDEN OF CONSTIPATION CARE IN NURSING HOMES

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Constipation is common among nursing home patients and nursing staff are responsible for much of the care associated with this disorder. To obtain information on time costs and burden of constipation on nursing home staff, eight registered nurses with direct patient care experience were asked to identify nursing care tasks associated with their most difficult patient, an average patient, and a patient with problematic constipation. They then rated the identified tasks on subjective burden (using a 5 point Likert scale, 1=no burden, 5=extremely burdensome), and estimated task duration in minutes and task frequency per shift. Dissimilarity ratings were also collected for 12 tasks. A set of eight main constipation-related care tasks were identified: daily monitoring, diet and activity review/modification, consultation with physicians, oral administration of laxative agents, administration of suppositories, enema administration, digital examination, and disimpaction. Relative to most difficult patient care tasks (e.g., gastric tube care, behavioral management), constipation care tasks were rated as slightly less burdensome (2.6 vs. 2.5); care tasks for average patients (e.g., vital sign monitoring, skin checks) were rated least burdensome on average (1.75). Task time estimates ranged from 1 to 60 min. Enemas and disimpaction were the most time-consuming constipation tasks (median 15 min, range 5 to 60 min). Constipation tasks were rated as most dissimilar from feeding, dressing, and mobility assistance and moderately dissimilar from bathing. Resident constipation results in nursing staff care tasks that are rated as burdensome and that take substantial time relative to other nursing care tasks.

KNOWLEDGE AND PERCEIVED RISK OF MAJOR DISEASES IN MIDDLE-AGED AND OLDER WOMEN

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Although Coronary Heart Disease (CHD) has traditionally been viewed as a disease affecting men, CHD is the leading cause of mortality in women. While research has focused on women's perceived risk of breast cancer (BC), very little is know about *differences* in women's knowledge and perceived risk *across* various diseases. This study compared knowledge and perceived risk for CHD and cancers (lung, colon, and breast) in 195 women (41-95 yrs). Women's knowledge of the leading cause of mortality across age and gender target grps and perceived risks (for both self and peers) of developing each disease were examined. Women's knowledge of mortality was more accurate for middle-aged than older target grps and for male than female target grps (ps < .001). A participant age by target age by target gender interaction indicated that older participants were less accurate in their knowledge that CHD is the leading cause of death in older women than in older men (34% vs 65%). Middle-aged participants, in contrast, had accuracy rates of 54 to 78% across target grps. Furthermore, women of all ages overestimated the risk of mortality from BC as compared to lung and colon cancers across various target age grps. Finally, repeated measures ANOVAs indicated that women incorrectly rated the risk of a woman developing BC and CHD to be equal, but correctly rated their personal risk of CHD to be higher than each type of cancer. These results indicate that women, particularly older women, hold various inaccuracies regarding disease risks that have implications for health behaviors and medical decisions.

IMPACT OF TOILET/GRAB BAR CONFIGURATIONS ON TRANSFER AMONG OLDER ADULTS.

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Almost 1200 individuals with mobility impairments responded to a nationwide survey to assess current ADA accessibility guidelines (ADAAG) related to use of toilets and bathing fixtures in public accommodations. This paper reports on the use of toilet fixtures and grab bars by a subsample 65+ years of age (n=517). The majority of the older respondents used walking aids (32.4% canes and 28.1% walkers) in their homes. Conversely, 55.4% used a wheeled mobility device outside the home, compared to only 27.1% who used canes and 16.3% who used walkers. These data suggest that, contrary to assumptions imbedded in ADAAG that transfers are made directly from a wheelchair to a toilet, the majority of older respondents in this study could stand up when transferring to a toilet. Survey results indicate that almost 4 out of 5 wheelchair users stood to transfer onto the toilet, 36% of whom used a front transfer (p<.001). Moreover, the configuration with grab bars on both sides of the toilet, which is used with a front transfer, had significantly higher percentages of wheelchair users (p<.01) and walking aid users (p<.001) reporting little difficulty with use. In comparison, the standard ADAAG configuration, which is intended for direct wheelchair to toilet transfer, had the lowest percentages of respondents reporting little difficulty. Although these data do not necessarily suggest that current accessibility guidelines and common practices are wrong, they do suggest that they may be incomplete when the wide range of functional abilities, preferences, and transfer techniques of older adults are considered.

FUNCTIONAL LIMITATION, DISABILITY AND PERCEIVED HEALTH OF THE OLDEST OLD*

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Using the first wave of the Asset and Health Dynamic Among the Oldest Old (AHEAD), the purpose of this research was to examine the effects of functional limitations and disability on perceived health status in those age 70 and older. This research provides a new methodology for solving issues of threshold response indicators and conditional question wording for functional limitations and disability. The model provides support for the disability process outlined by Verbrugge and Jette (1994) and also provided insight into the dynamics that operate between demographics, pathology, functional limitation, disability and perceived health status for older adults. For functional limitation, one domain for immobility and three domains for cognition were confirmed. Two domains were confirmed for disability: personal care, and household management. Pathologies, vision and hearing were found to have a substantial impact on all domains as well as perceived health status. Immobility was the most important domain that detracts from perceived health. Inability to recall information has a moderate negative effect on perceived health status. When controlling for immobility, personal care and household management were not significant predictors of perceived health status.

*This research was supported by NIA Grant Number R01-AG12420.

CHANGING SOCIAL CONDITIONS IN LATER LIFE, LOCUS OF CONTROL, AND LONGEVITY

A. M. Pienta, K. Rahrig, Institute of Gerontology, Wayne State University, Detroit, MI 48202, M. D. Hayward, Population Research Institute, Pennsylvania State University, University Park, PA 16802. Abundant research has documented the basic relationship between socioeconomic conditions and old age mortality. Less is known about how mortality risks are elevated in response to changing social conditions across the later years (i.e., retirement and widowhood). A theoretical model is developed to address the relationships among locus of control, changing social conditions of later life, and mortality. One hypothesis is that locus of control may predispose older men to be more susceptible to stressful life events. Using 24 years of prospective data for a nationally representative cohort of older men, discrete-time hazard models are estimated including SES over the life cycle, locus of control (internal/external), and multiple indicators of changing social conditions (retirement, disability, widowhood). Results show that having external locus of control in later life does increase one's risk of death. Further, locus of control is found to be linked to earlier social conditions and is determined in large part by educational attainment.

VALIDITY OF THE EPISODE-SPECIFIC INTERPRETATIONS OF EXERCISE INVENTORY IN ADULTS 75 YEARS OF AGE AND OLDER

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Understanding the exercise experiences of older adults is important for health care professionals who work to promote health behavior in this population. The purpose of this study was to examine the validity of the Episode-Specific Interpretations of Exercise Inventory (ESIE) in people 75 years of age and older. Twenty-two women and 6 men (age 82.1 ± 4.3; 26 White, 1 Black, 1 Hispanic) were assigned to either an intensive or home exercise group. The intensive group (n = 17) participated in a supervised program 3 times/week that involved three 3-month phases each of flexibility, strength, and endurance exercises. The home group (n = 11) was instructed to do flexibility and balance exercises 3 times/week at home for 9 months. One week each month all participants completed the ESIE after each of their exercise sessions. Repeated measures MANOVA showed that the ESIE subscales reacted in expected directions over the 9 months. Muscle/joint comfort varied by month (p = .05) with the intensive group experiencing increased comfort during flexibility and a sharp reduction in comfort during initial weight lifting and with higher intensities of aerobics. Muscle/joint comfort remained relatively constant for the home group. Sweat intensity increased with each phase for the intensive group but decreased across the 9 months for the home group (p = .00). Concentration on bodily movements increased initially with each phase for the intensive group (p = .01) and tended to be lower overall than the concentration of the home group. Feelings of well-being fluctuated across the 9 months for both groups. Responses to the ESIE reflected the nature of the exercise regimen and supported the validity of the ESIE with older exercisers. Supported by NIA, Claude D. Pepper OAIC AG13629 and NINR, F32 NR07221.

Self-rated Health and Symptoms: Evidence for a Subjective Trajectory of Health. Laraine Winter, M Powell Lawton, Christopher A. Langston, & Katy Ruckdeschel, Phila. Geriatric Center, Phila., PA 19141. Self-rated health (SRH) is an important construct in gerontology because it predicts mortality, disability, and morbidity better than objective health indicators do. Temporal relationships between symptoms and self-rated health (SRH) were examined in a longitudinal study of 54 elders. Participants completed SRH measures and a symptom checklist every evening for eight weeks. The symptom count data were coded in terms of change - increase, no change, or increase - from the previous to the present day, and these coded variables were examined in relation to SRH on the present day. Results revealed that both previous day's symptoms and **change** in symptoms predicted SRH on any given day: SRH was highest when symptoms had decreased from the previous day and lowest when symptoms had increased. We hypothesize that SRH may reflect individuals' sense of the trajectory of their health - the direction and rate of change in indicators like symptoms. If people are more sensitive to this trajectory than their physicians, this may help explain why SRH is a superior predictor of mortality than physician ratings. Research supported by NIA Grant R3707001.

A COMPARISON OF PREDICTORS OF DECLINE AND IMPROVEMENT IN ADL'S FOR A NURSING HOME POPULATION.

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This analysis examines a broad array of predictors of ADL decline and improvement (over a 90-day period) and asks whether the relationships are consistent for the two equations. Using Minimum Data Set (MDS) data for a sample of 27,000 nursing home residents from 3 states, we first identified the univariate factors that explain either decline or improvement in ADL function -- where 30.2% of residents declined and 17.6% improved. Over time, the ratio of decline to improvement becomes even greater.

Independent variables were examined according to their membership in three major classes: a) those that relate to cognition and communication skills, b) those that reflect clinical complexities, and c) all other predictors. For predictors based on baseline status as well as predictors based on change in these independent variables between baseline and follow-up, class "a" and "b" predictors are most important; and co-terminus shifts are more important than baseline status on these independent variables. As one would expect, declines in cognition, communication and clinical complexity are the major factors in ADL decline; improvement in these measures translates into ADL improvement. In general, there is one dynamic set of forces at work -- movement on independent measures in one direction results in ADL decline; movement in the other direction translates into ADL improvement.

AM I STILL ME? THE JOURNEY OF THE SOCIAL SELF THROUGH CHRONIC ILLNESS IN LATER LIFE.

C. King, Elderly Care Research Center, Case Western Reserve University, 10900 Euclid Ave., Cleveland, OH 44106-7124.

Participants:

J. Brown: Maintaining the social self through the management of arthritis.

C. King: Social support and negotiating the illness career among elderly home care recipients.

J. Schumacher: Patient and provider perceptions of meaning in older adult emergency department encounters.

L. Lovegreen: The preserving of the self in late-stage illness.

Discussants:

E. Kahana: Case Western Reserve University.

E. Stoller: Case Western Reserve University.

This symposium explores the ways in which older adults adapt to chronic illness while struggling to maintain a sense of self. The individual with chronic conditions strives to achieve this goal by negotiating the illness and enlisting or utilizing social support to create a stable self-identity.

To illuminate the continuum of stages of illness in late life, four separate studies are presented. Results from a pilot study of persons with arthritis highlight the role of identity maintenance while using self-care to manage chronic illness. An empirical study of home health care patients illustrates issues of controllability and predictability in how the individual negotiates the illness career with informal social support, in order to normalize the illness experience. In the third paper, the author considers how encounters within the formal health care system (in the context of the emergency room) help maintain or disrupt the continuity of the self in the face of chronic illness. In the final paper, a theoretical model is presented for understanding the role of physical and social environment in helping maintain the self for extremely frail or cognitively impaired elders.

Throughout the papers, it is argued that an integrative model of negotiating maintenance of "self" in late life must be tailored to illness adaptive tasks shaped by temporal dimensions of illness, personal and social resources available to the patient, and institutional pressures which threaten maintenance of the self. Discussants will address both challenges and promises in incorporating these domains in the study of illness trajectories in late life.

PHYSICAL FUNCTIONING PRIOR TO ADMISSION AND AT DISCHARGE AS PREDICTORS OF FUNCTIONAL OUTCOMES: A TEST OF THE FUNCTIONAL RESERVE HYPOTHESIS.

C.W. & B.A. Given M. Stommel & F. Azzouz

Colleges of Medicine, Nursing, Cancer Center, Michigan State Univ., E. Lansing, MI 48824. This research tests the functional reserve hypothesis by seeking to determine if high levels of physical functioning prior to hospitalization are related to higher levels of functioning and independence at 3, 6, & 9 months. Further, do higher levels of prior functioning effect outcome functioning by reducing losses in functioning at discharge which, in turn, are related to better outcome? Physical functioning prior to admission, following discharge along with comorbid conditions, primary diagnoses, and cognition were entered into a longitudinal model to predict functioning at, 3, 6, & 9 months among a cohort of 615 patients 55 + years of age. Measures of functioning at all observations were: independent, 1-3, 4-6 IADL's only and IADL's + 1-3 and 4-6 ADLS. Patients lost were no different than those retained in study. Functional states prior to admission were not related to discharge states. Prior independence was related to function at 6 & 9 months, comorbidity, age, and gender were not related to functioning at outcomes. Time from admission had a direct effect on outcomes at 6 months. Prior functioning was related to transition among states at successive waves. In summary, the data support the reserve hypothesis--those who were independent or had 1-3 IADL's prior to admission were more likely to have better recovery.

HEALTH, HERBAL PRODUCTS, MEDICATIONS, AND SENIOR ATHLETES

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Athletes at the U.S. National Senior Sports Classic VI (Tucson, Arizona, May 21-28, 1997), after registering, were presented with a survey and a return-mail envelope. Among the 10, 288 participants, 1,150 (11%) responded to the survey; ages ranged from 50 to 91 years old. The majority of athletes reported that their health was either excellent (59%) or good (39%). In the past two years, 28% of the respondents reported health problems due to exercise. Lower leg injuries (42%) were the most common problems reported (e.g., 22% knee injuries and 8% hamstring). More than three-quarters (78%) of the respondents reported using one or more medications. The top three categories included vitamins, estrogens, and drugs to lower blood pressure. Garlic, ginkgo, and ginseng were the most frequently reported herbals. Twenty-eight percent used over-the-counter products to enhance their competitive abilities. Two-thirds of the athletes reported that they "always" (35%) or "most of the time"(32%) try to exceed the norms on health tests. In comparison, nearly 20% reported that they do not try to exceed the norms. Respondents were asked about the importance of a regular exercise program and responded by rating Health (91%), Personal Challenge (74%), Recreation (66%), and Competition (57%) as being very important motives. These results can help forecast the changing context of exercise for older individuals.

Bodily Troubles, Talk, and Community Work in an Elderly Public Housing Complex

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Within research on aging a growing concern with community has emerged. Especially evident in environmental design, it has also been considered in social scientific literature as a means towards achieving a successful aging experience and has been explored in great detail in both literature dealing with assisted living and to a lesser degree residential housing, most notably the work of Arlie Hochschild.

However, this predominance in concern with design and activity has neglected an important question--How is community pragmatically achieved and how does it continue it's existence? After all, it is not an amorphous social form that exists independently of the individuals that compose it. Based on data gathered from an ethnography of a elderly public housing complex, I argue that community is a social phenomenon that must be actively worked at by the people that serve to constitute it and are in turned constituted by it. In order to locate community in the public housing complex, I found that it emerged in their talk about their troubles, or hassles, as it is commonly referred to in aging research. It is through the medium of talk, or "troubles talk" as I label it, that community emerges. Taking talk seriously, I present a section of a larger research project concerned specifically with the bodily troubles that the elderly in the complex "talk about" and the means through which this works towards the formation of community.

LOWER BODY FUNCTION AND MORTALITY IN MEXICAN AMERICAN ELDERLY

K.S Markides, S.A.Black., G.W. Ostir, J. Guralinik, J.S. Goodwin University of Texas Medical Branch, Galveston, Tx 77555. Using data from two waves of the Hispanic Established Population for Epidemiologic Studies of the Elderly we examine the independent impact of an objective composite measure of physical function (short walk, standing balance, chair stands) and a self-reported measure of lower body function net of other predictors of mortality including, age, gender, socioeconomic status, and presence of major chronic conditions. The Hispanic EPESE assessed a representative sample of 3,050 Mexican Americans aged 65 and over from the Southwestern states in 1993-4 and again in 1995-6. Of the original cohort, 224 subjects became deceased over the two year period. It was found that the performance measure of physical function had a stronger independent effect on mortality than self-reported measures supporting the notion that Mexican Americans are pessimistic in their assessment of their physical function. Performance based measures of lower body function capture underlying illness and illness severity not captured by presence of diseases and chronic conditions or by self-reported function and self-rated health. They are a particularly useful clinical tool in the study of the health of elderly Mexican Americans.

INCREASING OLDER ADULTS WITH DEMENTIA'S ENGAGEMENT IN DAILY ACTIVITIES

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Two nursing assistants who cared for five older adults with dementia living in a special care unit of an assisted living facility participated in staff training and management intervention. The intervention consisted of a procedure designed to prompt and reinforce engagement. The study was conducted as a multiple-baseline design across staff work-shifts. During baseline for the morning observations, the mean percentage of time samples in which residents were appropriately engaged was 41%. Engagement in activities increased to 81% during the intervention, and maintained at 83% during follow-up. For the afternoon observations, the baseline mean for appropriate engagement was 31%. Engagement in activities similarly increased to 72% during the intervention, and maintained at 68% during follow-up. These results suggest that frequent prompts and reinforcement by nursing assistants can increase the level of engagement of elderly residents with severe cognitive impairment.

APPROACHES TO MEASURING CARE RECIPIENTS' NEGATIVE REACTIONS TO ASSISTANCE

J.T. Newsom, N.L Adams, A. Rahim, H. Mowry, & J.D. Rogers, Institute on Aging, Portland State University, Portland, OR 97207-0751.

Recent results indicate that between 40% and 60% of physically disabled older adults who receive assistance with self-care and instrumental daily activities experience negative reactions to some of the help they receive (Clark & Stephens, 1997; Newsom & Schulz, 1998). These reactions seem to have important consequences for the mental health of the recipient, predicting depression up to one year later. Little is known, however, about the precise nature and the causes of such negative reactions. This presentation describes the methods used in a recent project, funded by the National Institute on Aging, intended to develop measures of specific reactions to informal caregiving assistance and to examine their causes. Reliability and validity of new measures related to specific negative reactions to assistance, such as temporary decrements in self-esteem, attributions of failure, threats to independence, attributions of the helpers intentions, and feelings of indebtedness, are presented. Results indicate that the causes of negative reactions differ for specific negative responses, but that low chronic self-esteem and low sense of personal control are crucial to understanding the causes of negative reactions. These results have important implications for developing and assessing interventions aimed at improving the informal caregiving process and the mental health of physically impaired older adults in the twenty-first century.

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THE RELATIONSHIP BETWEEN DEPRESSION AND STROKE PATIENTS' PREFERENCE FOR PRESENT HEALTH STATE.

HB. Bosworth, RD. Horner, DB. Matcher, for the VAST study group. HSR&D, Durham VAMC(152), Durham NC 27705

This study examined the longitudinal effect of depressive symptoms on acute ischemic stroke patients' perceptions of their current health. Analyses used data from the VA Acute Stroke (VASt) study, a nationwide prospective cohort of 881 (M=68 years of age; SD=10 years) acute stroke patients admitted for stroke at any of 9 VA sites between 4/1/95 and 3/31/97. Patients were interviewed at 1, 6, and 12 months post admission via telephone regarding depressive symptoms (short form CES-D), activities of daily living (ADL), and preference for current health state (measured by the time-tradeoff method). A set of regression analyses controlling for age, gender, level of education, and race, indicated that worse ADLs and more depressive symptoms at 1-month were inversely associated with patients' perceptions of their current health state at 6-months. However, only the number of depressive symptoms were related to patients' perception of their current health state at 12-months post-stroke (i.e., willingness to trade more years of life to live in perfect health). There were no interactions between ADL and CES-D. We conclude that limited functional status is related to short-term perceptions of current health; however, depressive symptoms continue to be independently related to longer-term perceptions of health. Both physical well-being and mental well-being need to be considered among stroke patients.

IN THEIR OWN WORDS: SELF-REPORTED COPING STRATEGIES OF OLDER ADULTS WITH VISION LOSS.

M. Brennan, A. H. Horowitz, J. P. Reinhardt, R. L. Leonard, D. Benn, & V. Cimarolli, Arlene R. Gordon Research Institute of The Lighthouse Inc., 111 E. 59th St., New York, NY 10022.

The present qualitative study was conducted in order to explore alternative paradigms for research on coping, as suggested by limitations using quantitative methods previously reported in the literature. The goals of the present study were to develop a typology of the coping strategies older adults self-report in adapting to vision impairment; and to identify emerging patterns and themes in these self-reported coping strategies. Three previous quantitative studies of adaptation to vision impairment conducted at the Lighthouse (n = 155, 95, and 343, respectively) provided extensive data (i.e., verbatim recordings of spontaneous comments or responses to open-ended questions). Textual data were examined using the "Grounded Theory" approach (Glaser & Strauss, 1967) with the Atlas/TI qualitative analysis software program (Muhr, 1998). Findings indicated that elderly with vision impairment reported a vast array of coping strategies in behavioral, psychological and social domains; most used multiple coping strategies. Major themes in self-reported coping strategies included difficulty in balancing norms of independence with the functional losses resulting from vision loss, and the importance of the informal social network in helping the older person adapt. Behavioral and social coping strategies appear to compensate for functional disability, in contrast, psychological coping strategies appear to address the negative internal sequelae of vision impairment (i.e., thoughts and feelings). Implications for future research and practice will be discussed. [***Research Funded by the Macular Disease Foundation, Virginia Beach, VA***]

Comprehensive Assessment of Older Persons with Cancer: Merging Medical 'Disease Stage', Psychosocial 'Illness Phase' and Clinical 'Performance Status'.

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Psychosocial research on elderly persons with cancer often works at the interface between three variable domains: Medical/disease stage of the neoplasm, functional performance of the patient, and psychosocial demands within the family. However, studies rarely if ever consider all three domains simultaneously. For example, clinicians treating patients with 'early stage' disease tend not to address the psychosocial demands of the 'crisis phase' of illness. And, social scientists focused on coping and adjustment issues are usually unaware of prognostic indicators and clinical performance. The purpose of this study is to present a comprehensive classification system that merges these research traditions. From the biomedical sciences, the TNM (tumor size, node involvement, evidence of metastasis) universal classification system is used by clinicians and pathologists to stage cancer at various anatomic sites. From the social sciences, a developmental framework by Rolland conceptualizes 'illness phases' (crisis, chronic, and terminal), each of which hold implications for family coping and adaptation. The third research tradition is functional performance which, in the area of cancer assessment, is most often measured by the Karnosfsky Performance Score. It is well known that functional performance is a powerful predictor of survival. We therefore present a comprehensive model that combines these three traditions: Medical (M_{TNM}) + Psychosocial ($P_{illness\ phase}$) + Performance ($K_{Karnofsky}$) and test it on a sample of 152 middle and older age cancer patients with a variety tumor types. Relationships are examined among disease stage, psychosocial illness phase, performance status, and predicted survival.

RESTRICTION OF NORMAL ACTIVITIES AND DEPRESSED AFFECT IN BREAST CANCER PATIENTS

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Data from a survey of breast cancer patients (n = 95) provide evidence for the central role of restriction of normal activities in predicting depressed affect. Restriction of routine activities was predicted by indicators of illness severity, higher public self-consciousness, and lower levels of perceived social support. In turn, activity restriction had strong direct effects on symptoms of depression after controlling for variance explained by age, income, self-consciousness, illness severity, and social support. Moreover, activity restriction mediated the impact of illness severity, public self-consciousness, and perceived social support such these variables predicted symptoms of depression largely to extent that they disrupted ability to conduct normal activities. Moderation by activity restriction was also observed; that is, recurrence of breast cancer, high public self-consciousness, and less social support were particularly distressing in the presence of high levels of activity restriction. These results have important implications for early identification and treatment of individuals most at risk for poor adjustment to serious illness.

COPING AS A PREDICTOR OF ADAPTATION IN ELDERS WITH AGE-RELATED VISION IMPAIRMENT

D. Benn, J.P. Reinhardt, The Lighthouse Inc., Arlene R. Gordon Research Institute, 111 East 59th Street, New York, NY 10022.

Despite a large empirical literature on stress and coping, few studies have specifically examined coping with age-related vision impairment. As part of a larger, longitudinal study, this study of baseline data investigated multiple coping strategies as predictors of adaptation in 341 community-residing elders experiencing late-life vision impairment. Through in-person interviews, elders responded to several measures including five single-item indicators of different coping strategies and three outcome measures of adaptation (life satisfaction, depression, and a domain-specific outcome of adaptation to vision loss).

Results from three 2-step hierarchical multiple regression analyses indicated that coping significantly predicted adaptation after controlling for demographic variables, health and vision characteristics. Acceptance significantly predicted all three adaptation outcomes. Seeking social support significantly predicted life satisfaction and the domain-specific outcome of adaptation to vision loss. Wishfulness significantly predicted all three outcomes. Instrumental and intrapsychic coping were not significantly related to any of the outcomes. Whereas acceptance and seeking social support were associated with greater adaptation, wishfulness was related to reduced adaptation. These findings suggest that the type of coping used by elders may have significant implications for adaptation to age-related vision loss.

QUALITY OF LIFE AND LOWER EXREMITY STRENGTH IN OLDER MEN WITH LOW TESTOSTERONE

TESTOSTERONE P.K. Mahoney, D.R. Earles, S.T. Reisine, K.D. Marcello, J.R. Fenster, J.O. Judge, A.M. Kenny, University of Connecticut Health Center, Farmington, CT 06030-6147.

Aim: To examine the relationship between health-related quality-of-life and leg strength in older men with low bio-available testosterone (BioT). **Methods:** 42 older healthy men (76±4 years) with low BioT (97±22ng/dl) were recruited from the community. The SF-36 assessed quality of life on two dimensions: Physical (PCS) and Mental (MCS) Component scores; strength was measured using the Keiser leg press to obtain 1 repetition maximum (newtons/kg). **Results:** The men scored above average for their age on MCS (X=58; sd=6.5) and PCS (X=45; sd=10.6). Mean (sd) strength scores on left and right legs were 11.7 (3) newtons/kg and 11.8 (3) newtons/kg, respectively. Pearson correlation coefficients calculated for PCS, MCS, BioT levels, strength and age demonstrated PCS correlated with age (r = -.44, p=.01) and 1-RM (r = .42, p=.01). BioT levels and MCS did not correlate with the other measures. **Conclusions:** Strength appears to be associated with the physical dimension of quality-of-life among older men. Larger samples are needed to assess the relationship between BioT levels and quality of life. Sponsored by NIH Grant # 5P60-AG13631-02. BSS-15

RESULTS OF AN EXERCISE AND QUALITY OF LIFE INTERVENTION WITH OSTEOPOROTIC WOMEN.

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Osteoporotic vertebral fractures (OVF) impair quality of life (QOL). We studied 185 women with OVF ($\bar{X}$ age= 80.9; $\bar{X}$ # fxs=2.4) in a randomized controlled trial (with intervention & comparison groups) of exercise and QOL intervention (EXQOL) in retirement communities (CCRCs). Three primary outcomes were back strength (BS); psychiatric dysfunction (GSI); and functional status (FSI). Sites did not differ at baseline on key IVS or control variables. The study design is presented below:

Group	1^{st} 6 mos.	2^{nd} 6 mos.
Intervention	EXQOL	Self-maintenance
Comparison	General Ed	EXQOL

The estimated changes in the primary variables in a controlled model after 6 months were:

Group	BS	GSI	FSI
Intervention	3.314	-0.009	0.034
Comparison	-2.028^{**}	0.031^{**}	0.101

The two groups differed significantly on the change in BS & GSI at six months. After crossover, the comparison group significant- ly improved in BS and GSI. Given that CCRCs meet many IADL needs, subjects may choose not to resume IADLs even when FSI improves; thus, FSI was unaffected by the intervention. However, the EXQOL intervention clearly improved both BS and GSI, two important parameters of QOL. ** $p<0.01$

SELF-RATED FUNCTION AND HEALTH AND THEIR RELATIONSHIP TO POSTMORTEM EVIDENCE OF BRAIN INFARCTS: FINDINGS FROM THE NUN STUDY.

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Previous findings have suggested that self-rated function is more strongly associated with mortality than is self-rated health. We hypothesized that the strength of the relationship of self-rated function to mortality was in part due to the presence of brain infarcts, in particular lacunar infarcts. Self-ratings of function and health (i.e., using a five-point scale ranging from excellent to poor) were assessed annually on 630 participants in the Nun Study. Mortality surveillance extended from Oct. 31, 1991 to April 3, 1997. Among those who died, neuropathological examination determined postmortem evidence of infarcts. The percent with postmortem evidence of lacunar infarcts ranged from 19% for those who rated their function as excellent to 69% in those who rated their function as poor (trend p-value<0.004). The relationship between self-rated health and postmortem evidence of lacunar infarcts was non-significant. Self-rated function was significantly associated with postmortem evidence of brain infarcts, primarily lacunar infarcts. This finding suggests that lacunar infarcts may be experienced as functional loss, but that these infarcts may not be recognized or labeled as disease.

OLDER COUPLES COPING WITH WIVES' OSTEOARTHRITIS (OA): PROBLEMATIC SUPPORT FROM HUSBANDS

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OA affects over half of older women and can cause considerable pain and disability. These symptoms of OA have the potential to undermine support available from the spouse. The current study examined pain and disability experienced by 98 older women with OA, their negative affect (depression, anger), and problematic support from their husbands (critical attitudes about wives' coping, insensitive support). We predicted that wives' reports of pain and disability would be related to husbands' reports of problematic support and that problematic support would, in turn, be related to higher levels of negative affect for wives. Results revealed that women with higher levels of disability (but not pain) had husbands who reported more critical attitudes and more insensitive support. Moreover, husbands' critical attitudes (but not insensitive support) were related to wives' depression and anger (controlling for pain and disability).

CLINICAL CHARACTERISTICS OF ELDERLY MALE VETERANS WITH ERECTILE DYSFUNCTION

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The issue of aging and sexuality is an important topic with respect to veterans, who comprise 50% of the growing elderly population in the U.S. (Mulligan & Moss, 1991). Many of the veterans who seek services at the Boston VAMC Andrology Clinic are older individuals. In this study, we examined a sample of Andrology clinic service-users during 1990-1997 at the Boston VAMC, in order to ascertain the sexual functioning characteristics that best distinguish older and younger veterans. Our sample consists of male veterans 38-80 years of age (M=61.5, median=64) administered a Structured Clinical Interview which assessed their current sexual difficulties. In our preliminary analyses (n=101), we performed a median-split based on age, comparing veterans in terms of their medical, psychological, and demographic characteristics, as well as the nature of their current difficulty with sexual functioning. Demographically, the adult (M age=53) and elderly groups (M age=70) did not differ with respect to marital or relationship status. Although the number of medical problems contributing to erectile dysfunction (ED) did not differ between groups, younger adults exhibited significantly greater mental status difficulties and psychosocial stressors when compared to the elderly group. Also, there was a trend indicating that younger adults receive recommendation for psychotherapy and a diagnosis of pure psychogenic ED more often than elderly individuals. Final analyses will include an additional 200 service-users, and will compare treatment choices, satisfaction with treatment, and specific urological abnormalities in older and younger veterans.

PSYCHOSOCIAL ASPECTS OF LIVING WITH PROSTATE CANCER.

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Because prostate cancer (PCa) is the most common non-skin cancer among men, especially older men, and is often slow moving and treatable, there are hundreds of thousands of Pca survivors alive today. Yet, very little research has been done on psychological and social aspects of PCa survivorship. Autobiographical books and Internet contributions by PCa survivors (and some wives) were examined for experience-based expressions of key personality and social psychological factors, especially control, attributions, social comparison, and coping strategies. Results show that: 1) the ways these processes are expressed are key to successful dealing with PCa; 2) age is a factor, in that older men appear less actively focused on being in control and less aggressive in using active coping strategies and yet report equal or higher well-being; 3) these processes proceed through phases from diagnosis to treatment decision time to treatment and recovery, and, finally, to a new post-treatment "stability," with varying emphases on control, social comparison, and types of coping strategies. For example, soon after diagnosis men experience a general sense of loss of control; at treatment they may feel considerable specific control (sometimes too much in relation to desired), in the recovery period loss of specific control (incontinence, especially) is important, while generalized sense of control is crucial for well-being and possible personal growth for the long term.

DIABETES AND FUNCTIONAL DECLINE: RESULTS OF A LONGITUDINAL CASE-CONTROL STUDY

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OBJECTIVE: To determine whether type2 diabetes among community-dwelling young elderly is associated with clinically significant functional decline at 8 years of follow-up. RESEARCH DESIGN AND METHODS: A longitudinal case-control study with measures at baseline and 8-years of follow-up. Subjects were a community-dwelling sample of Mexican American and European American diabetics and matched non-diabetic controls, aged 54 – 69 at baseline. Controls were group matched to cases based on gender, ethnic group, age decade, and socioeconomic status. Type2 diabetes was diagnosed using WHO blood glucose criteria. Functional status was assessed with the Sickness Impact Profile (SIP). Based on published guidelines, clinically significant functional decline was defined as an increase of 3+ points in SIP scores. Data at follow-up were obtained on 115 diabetics and 96 non-diabetic controls for a 76% response rate. Analyses were performed using a conditional logistic model that took into account the study design and matching procedure. RESULTS: Significant differences between cases and controls were found for SIP dimensions related to physical function and activities of daily living, but not to psychosocial function. The relative risk of clinically significant functional decline among cases vs. controls was statistically significant for: mobility, 4.5 (95% CI: 1.5-13.1); bodily care and movement, 2.4 (95% CI: 1.1-4.9); and home management, 3.4 (95% CI: 1.6-7.0). CONCLUSION: Type2 diabetes has a substantial impact on physical functional decline in community-dwelling young elderly over an 8-year period. Public health interventions to prevent diabetes and its functional consequences should receive increased attention.

PREDICTORS OF PAIN IN OLDER PERSONS WITH OSTEOARTHRITIS (OA) OF THE KNEE

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OA of the knee is one of the most common sources of pain among persons 65 and older. In our study of 285 persons with OA, we examined the relationship between demographics, body mass index (BMI), anger expression, and pain-- OA and general (GNPAIN). Mean age was 68 yrs (34% men, 77% white, 55% had attended one or more years of college). Pain, BMI, and anger were measured at time 1 (T1) and one year later (T2). Correlational analyses for OAPAIN and GNPAIN were similar. Positive relationships were found between sex, BMI, and anger-out, while education (EDUC) was negatively associated with pain at T1 and T2. Age and race were not related to pain. Regression analyses were conducted for both times. BMI and sex were significant predictors of OA and GNPAIN at T1 and T2. Anger-out predicted T1 and T2 GNPAIN, and predicted T2 OAPAIN. EDUC predicted T1 OAPAIN but not T2. Other personality factors and use of medications will be discussed. (Supported by MH51800).

OSTEOARTHRITIS AND THE ROLE OF SPECIFIC PAIN COPING STRATEGIES: RESULTS FROM THE OASIS STUDY

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Pain is the primary limiting factor in osteoarthritis, one that affects mobility, functional capacity, psychological well-being, and social functioning. Understanding how non-pharmacological pain coping strategies affect pain and performance can lead to interventions for this population.

The Observational Arthritis Study in Seniors (OASIS) is a prospective, observational study of 450 older adults with OA of the knee and pain assessed at enrollment, 15 and 30 months later on a wide range of biopsychosocial variables. Four performance outcomes were measured: amount of physical activity, perceived difficulty on a range of physical activities, predicted difficulty, and distance walked in 6 min.. In addition, pain and depression were analyzed as outcomes.

Factor analysis of the coping strategies revealed 4 factors: Worry & Pray, Reinterpretation of Sensation, Divert Attention, and Competing Activities. Bivariate correlations and regression analyses revealed significant associations between each of the six outcomes and the coping factors at baseline after controlling for demographic variables, disease severity (X-ray), health status (BMI, comorbidities, fractures) and other variables. Implications for treatment and research to be discussed.

MEDICATION BELIEFS AND PERCEIVED ADHERENCE TO MEDICATIONS IN AFRICAN AMERICAN HYPERTENSION PATIENTS.

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Though medications can be used to control hypertension, nonadherence to medications is a problem among African American Hypertension patients. Their beliefs about medications may be an important factor in adherence to medications. In this study we hypothesized that older men have more negative beliefs toward taking medications than older women and younger women and men. It was also hypothesized that positive beliefs about medications would be associated with greater perceived adherence to medications. 166 African American Hypertension patients in an age-stratified (45-89) sample completed the Medications Opinions Questionnaire (MOQ), along with a measure of perceived adherence to medications. The MOQ assesses beliefs about avoiding medications, beliefs about body sensitivity to medications, and beliefs about medications as poison. In support of our hypothesis, analyses of variance revealed that men in the oldest age group (75& over) report more negative beliefs about medications than women in this age group and younger women and men. Men in the youngest age group (45-54) reported the most positive beliefs about medications compared to the other groups. Those who believe in avoiding medications and perceive greater body sensitivity to medications perceive less adherence to medications. Research funded by NIA grant #7-P50-AG11715 awarded to Denise C. Park.

AN EXAMINATION OF THE EFFECTS OF STRUCTURED SOCIAL SUPPORT ON COPING AND FUNCTIONING OF PROSTATE CANCER PATIENTS

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Prostate cancer is the most common cancer in the men with an estimated 200,000 new cases in the United States in 1998. With improved diagnostic techniques and increased longevity, the challenge of aging in the new millennium will be coping with the increasingly likely diagnosis and treatment of cancer. Prostate cancer, in particular, has the potential to profoundly affect both physical and psychological functioning. Social support has been shown to be beneficial to persons with cancer, however, under-representation of men in research suggests possible biases about the appropriateness of psychosocial interventions for men vs. women. The purpose of this study was to examine data from a prostate cancer support group in order to understand the characteristics of men who chose to attend and to examine the health related outcomes. Fifteen men who attended the Prostate Cancer Support Group and thirty-seven matched controls were assessed using the Mini-Mental Adjustment to Cancer Scale (Mini-MAC) and the 36 -Item Health Survey. A significant difference was found with the support group more frequently endorsing a coping style of "anxious preoccupation" ($t=3.47$, $p=<.01$). Support group men also endorsed a coping style which minimized "helplessness and hopelessness" and emphasized "fighting spirit" ($t=2.594$, $p<.05$). There was no significant difference in overall health outcome ($t=0.69$, $p>.90$). Only 3% of the control group men reported that they would have attended a support group, if they had known about it. 40% said they would not attend and 57% were not sure. Among all of the men in the study, 20% reported having only one person that they could count on for social support. The need to develop psychosocial interventions to improve coping in the changing contexts of aging is discussed.

THE STUDY OF CHRONIC PAIN IN LATER LIFE: OPPORTUNITIES AND CHALLENGES.

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Although one of the most frequent consequences of chronic illness in later life is chronic pain, the geriatric pain literature is limited both in size and scope. It also can be difficult to locate information on chronic pain because it is often scattered across disciplines. The purpose of this project was to develop a comprehensive, multidisciplinary review and analysis of the chronic pain and aging literature that would provide a foundation for scientists and clinicians to address the multiple challenges surrounding chronic pain and older adults. We identified 535 articles, published since 1990, that addressed issues of geriatric pain. Approximately, 35% of the articles discussed chronic pain in relationship to a particular disease. Many investigators studied chronic pain by examining the experiences of younger and older adults (45%). Over one-half of the studies dealt with treatment regimes; other important variables such as functional outcomes (10%), psychological consequences (27%), and social correlates (16%) received substantially less attention. The analysis of the articles' content suggests the need for specific protocols for studying and treating chronic pain that includes an examination of its biopsychosocial impact on the lives of older adults.

Funded by the AARP Andrus Foundation

SCOTTISH PUBLIC ATTITUDES TO CORONARY HEART DISEASE: ARE THERE GENDER DIFFERENCES?

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Coronary heart disease (CHD) is the leading, single cause of death for women in Scotland and is an older woman's major health risk. Despite these alarming statistics, CHD is still regarded both by the medical profession and by the public, as a disease that mainly affects men. The view that CHD poses little threat to women holds important implications for the way in which CHD is diagnosed and treated in Scotland. The aim of our study therefore, was to investigate how much the Scottish general public know about CHD and to determine how at risk they feel from the disease. In particular, we wanted to determine if there were any gender differences in CHD knowledge and risk perception. Two hundred members of the Scottish general public were interviewed about their attitudes to CHD. Findings include the following: CHD was cited more often as the leading, single cause of death for men than for women; Men were more likely to feel at risk from CHD, whereas women felt more at risk of cancer; More symptoms of a heart attack could be named than symptoms of angina. Conclusions - There is a lack of awareness of the prevalence of CHD amongst women in Scotland. Gender differences in knowledge and risk perception were also apparent. Scottish health promotion campaigns should aim to increase knowledge of coronary heart disease amongst women. As the Scottish population ages heart disease will become epidemic in elderly women unless preventive interventions across the lifespan are undertaken.

ACCEPTANCE OF ILLNESS IN TYPE II DIABETICS

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In a survey conducted at Henry Ford Health System in Detroit, MI, acceptance of long-term management of diabetes was indicated as the primary problem encountered by patients. Acceptance of the long-term complications of diabetes will lead to positive self-care behaviors and good metabolic control. The purpose of this study was to explore the relationship between acceptance of diabetes with self-care activities, health promotion behavior, supportive family behaviors, and metabolic control measured by HgbA1c of Type II diabetics. Sample consisted of 49 diabetics with a mean age of 68.7 years. Instruments used were Ideas about Diabetes-Revised (IAD-R) measuring Acceptance, Health Promoting Lifestyle Profile II, and Diabetes Family-Behavior Checklist. Preliminary results revealed that the acceptance scale was negatively associated with HgbA1c at a 0.10 level of significance. This suggests that acceptance of the disease improved compliance resulting in better metabolic control. The three subscales of acceptance , i.e., outlook, confidence, and inhibitors to acceptance, were significantly correlated with health promotion behavior. Supportive family plays an important role in adherence to treatment. Our results revealed that family support were related to acceptance (outlook), self-care activities, and health-promotion behavior of the patients. Sensitivity of health care professionals can facilitate exploration of patients' degree of acceptance. An intervention for patients with Type II diabetes to deal with the lack of acceptance of a long-term disease and subsequent management will be developed. This study was supported by Truman State University.

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SOCIAL INTERACTION AND MORTALITY; FOUR YEARS FOLLOW-UP STUDY IN JAPAN

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This study clarified the relationship between social interaction and mortality by four years longitudinal study. The subjects were all the 60 years or above who lived in a typical farming community near major urban centers in Japan (n=1,069). 950 subjects answered the questionnaire and the return ratio was 88.9%. 127 subjects (13.4%) were deceased within four years period after survey. The contents of the questionnaire were about social interaction (using the scale of "Evaluation of Social Interaction" which is divided into 5 subscales by factor analysis. i.e.: a) Independence, b) Social curiosity, c) Interaction, d) Feeling of Safety, e) Participation in the society.) , health status, life style, and their feeling about themselves. The results were as follows: 1) Low score of "Evaluation of Social Interaction" were significantly related to high mortality within four years. 2) For subjects under 75 years of age, lack of "Communication with outsiders", "Having active role", "Having counsel", and "Feeling of importance" for male, and "Life style motivation", "Active approach", and "Feeling of importance" for female were significantly related to higher mortality. 3) For subjects over 74 years of age, lack of "Reading books" for male, and "Reading newspapers", "Having active role", "Participation in neighborhood affairs", "Having a hobby", "Life style motivation", "Active approach", and "Feeling of importance" for female were significantly related to higher mortality. However, female subjects who had enough "Communication within the family" were significantly higher mortality compared to those not having communication. 4) By Cox's hazards model adjusted for age, sex, and mobility, hazards ratio for mortality were significantly higher in not "Having active role" (hazards ratio 1.65), "Having a hobby" (1.60), "Life style motivation" (2.16), "Active approach" (2.00), and "Feeling of importance" (1.73). Further research is needed on this cohort to develop a more effective scale of social interaction which can predict precisely the mortality related to socio-psychological factors.

FORMAL HEALTH CARE UTILIZATION: EXAMINING HETEROGENEITY FOR OLDER WHITES AND BLACKS.

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Many studies have examined the differences between older whites and blacks in terms of health care utilization (e.g., clinic, physician, emergency room, hospital stays, and outpatient). Few studies have focused on the differences or heterogeneity that may exist within each racial group. The purpose of the present study is to explore formal health care utilization differences/heterogeneity within the older black and white samples with respect to age, gender, type of chronic illness, type of residence setting, and potential social support. A community sample of 383 black and 385 white older adults were randomly selected. Results indicated that heterogeneity existed for both older whites and blacks. For example, older whites in the 71-79 age group had a greater amount of outpatient visits compared with the 65-70 and 80+ age groups (44.0% versus 39.0% and 38.0% respectively; p=0.06). Older blacks who were in the 65-70 and 80+ age groups had a greater amount of emergency room(ER) visits compared with the 71-79 age group (43.0% and 42.0% respectively versus 30.0%; p=0.07). About gender, older white men had more hospital stays compared with older white women (49.0% versus 43.0%; p=0.07). Older black women had more clinic visits compared with older black men (23.0% versus 30.0%; p=0.05). Findings will be discussed regarding the other variables (e.g., type of chronic illness, type of residence setting, and social support). Knowledge about heterogeneity for older adults in different racial groups provides insights that may be useful to health care providers.

THE EFFECT OF BMI ON CHRONIC DISEASE SEVERITY, AND HEALTH AND FUNCTIONAL STATUS.

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Public health recommendations regarding body-mass index (BMI) have been based largely on mortality data. Those recommendations have classified BMI into 4 groups; <19, 19-24.9, 25-29.9, and 30 or over. In this report, nationally representative data from 9,868 adults aged 40 to 70 years of the Health and Retirement Survey are used to estimate the effect of baseline BMI category on disease severity, and health and functional status at 4-year follow-up. Less than 2 percent of the sample had a BMI of less than 19, and that category was dropped from further analysis. Because different levels of obesity may have different implications for health, the 30 or over category was split into two. Sixteen percent had a BMI of 35 or over, 8 percent 30 to 34.9, 40 percent 25 to 29.9 and 35 percent 19 to 24.9. Disease severity indicators take into account prevalence, symptoms, and treatment. For hypertension, diabetes, and arthritis severity, each BMI category above the 19 to 24.9 category was associated with an increase in disease severity. Changes in stroke, heart, cancer, and lung disease severity were not associated with baseline BMI category. Each BMI category above the 19 to 24.9 category was associated with a greater decline in perceived health and mobility, and an increase in pain. These effects were independent of baseline disease severity. In general, the effect of BMI category was linear up through the 35 and over category. This suggests that as persons age, maintaining a current weight is beneficial, even for those with an already high BMI. It also suggests the possibility that moderate weight loss is beneficial even for the very obese.

DEPRESSIVE MOOD AND SUBJECTIVE HEALTH AMONG THE OLDEST-OLD : PREDICTORS OF HEALTH EVOLUTION IN A LONGITUDINAL PERSPECTIVE

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Many research findings emphasize the impact of subjective health and depressive mood on both mortality and functional health. However, the underlying process at work in this association remains largely unexplored.

Since 1994, the Swiss Longitudinal Study on the Old-Old, has followed a cohort of 340 randomly sampled octogenarians living at home at that time.

Based on the results obtained after four waves (1994-1997), regression analyses revealed a strong effect of subjective health and depressive mood at baseline interview on functional health trajectories and on mortality, whereas functional health does not predict future states of well-being.

In our paper, we will also examine the determinants of subjective health and depressive mood . We will demonstrate that mood and subjective health are not independent and that these indicators are significantly related to SES, gender and regional context.

BEING SOCIAL ACTIVE REDUCES RISK FOR DISABILITY: PROSPECTIVE EVIDENCE FROM THE NEW HAVEN EPESE.

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While physical fitness is known to have clear beneficial effects for survival and reduced risk of disability, few studies have investigated whether similar health benefits can be derived from engaging in social activities. This issue is examined using data from 9 yearly interviews from the New Haven EPESE, a cohort study of 2812 subjects aged ≥ 65. Disability was measured by the Katz ADL index (coded none, mild, severe) and a 3-item index of mobility disability (Rosow-Breslau, range 0-4). Social activities was measured by a 9-item scale (range 0-18) of the frequency of being engaged in common social and work activities. Weighted generalized linear models (GEE) models were used for the analysis of changes in disability status with increasing age. After adjustment for age and sex, social activities was associated with a significantly reduced risk of ADL disability (OR=0.80; p<.0001) and mobility disability (OR=0.84; p<.0001). These associations were only slightly reduced after additional adjustment for sociodemographic and health-related risk factors of disability. The results suggest that important health benefits may be derived not only from being physical active, but also from being socially active.

THE ADDITIVE EFFECT OF CHILD'S EDUCATION ON FUNCTIONAL STATUS OUTCOMES OF OLDER ADULTS IN TAIWAN

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Research shows that educational attainment of an older respondent is among the most influential socioeconomic determinants of health. Close social interaction, and high rates of coresidency, between older adults and their children in non-western societies, like Taiwan, means that health decisions, preventions, and behaviours are often influenced by other family members. This implies that the education of others may be equally important in determining health outcomes. A sample of older adults from Taiwan is used, (The 1989 Survey of Health and Living Status of the Elderly in Taiwan, N=4,049), to test the hypothesis that education of children has an added influence on functional status distributions of older adults, net of their own education, in base models and adjusting for a broad series of covariates. Outcome variables include existence of any functional limitation, and severity of limitations for those who report any. Logistic regression results for base models, adjusting for age and sex, confirm the hypothesis in terms of any limitations (beta for child's education=-.54, p < .01), while ordinal logistic regression results suggest children's education may be more important than respondent's own education in predicting severity (beta=-.46, p<.05). Hierarchical results adding sociodemographic and psychosocial covariates corroborate findings. Conclusions highlight the importance of considering the characteristics of caregivers and social network affiliates in models that ascertain the determinants of health. This merits study in all societies, including western settings, but it is particularly true in cultures that maintain high rates of coresidency.

INDIVIDUAL CHANGES IN HEALTH OUTCOMES: THE VA NORMATIVE AGING STUDY

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We examined changes in multiple dimensions of perceived health (SF-36) over 4 years and their responsiveness to changes in medical conditions and in health care use. Men (mean age 65) in the Normative Aging Study completed the SF-36 in 1992 and in 1996; 950 responded at both occasions. Scores on 6 scales of the SF-36 were obtained: physical functioning (PF), bodily pain (BP), general health perceptions (GH), vitality (VT), social functioning (SF) and mental health (MH). Change scores were divided by 1992 SD and multiplied by 100% to yield effect size as percent of baseline SD. These were then compared between men with and without a given health change or health care use, after adjusting for baseline age and diseases. Although declines in perceived health over 4 years were generally small (< 25% SD) and in one case (GH) a 20% SD increase was seen for the sample as a whole, men who developed new illnesses (30%), who perceived their health as worsening (14% in past year, 7% in past month), or who were hospitalized (10%) reported larger declines in perceived health, from 15% to 133% SD, after adjusting for initial age and diseases. These results indicate that measures of perceived health such as the SF-36 are responsive to changes in medical conditions and to health care utilization.

TEN-YEAR SURVIVAL AND MOBILITY PREDICTORS.

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To determine factors predictive of 10-year survival and maintenance of independent mobility among community-dwelling older adults, we conducted a cohort analysis from baseline data collected in 1986-7 and follow-up assessments in 1996-7. Independent mobility was defined as getting out of walking distance of one's home without help. There in-home assessments included standardized questions related to socio-demographics, medical diseases, geriatric syndromes, health behaviors, neuropsychological problems, medications, and social support. Subjects were part of a random sample of adults aged 55+ residing in Jefferson Co., AL with independent mobility in 1986-7 (N=271; mean age 69.4; SD=8.6; 65% female; 38% African American). The 10-yr. survival rate was 42%; 43% reported maintained independent mobility and 15% experienced a loss. Baseline characteristics significantly predictive of survival or maintained mobility by Chi square analyses were: age < 75; female gender, African American race, higher education, being married, single-family housing, income adequacy, better perceived health, not having heart trouble, circulation problems, stomach ulcers, cataracts, or memory problems, good hearing, exercising, CES-D$\leq$16, MSQ$\geq$9; low BMI, taking hormones and not taking anti-coagulants. Multivariate logistic regression analysis identified independent and significant predictors of survival as lower age, female gender, African American race, single family housing, not having an ulcer or cataracts, and exercise. Significant independent predictors of maintained independent mobility were younger age, single family housing, not having circulation problems or cataracts, and taking hormones. These data highlight the importance of exercise as a survival predictor and hormones for maintained mobility. Circulatory problems and cataracts were predictors of both mortality and mobility loss. Female gender and African American race are associated with survival, but not maintenance of independent mobility.

A LIFE COURSE STUDY SHOWS THAT COGNITIVE AND REPRODUCTIVE FUNCTION MAY BE INFLUENCED BY A COMMON EARLY FACTOR

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Several studies report that hormone replacement therapy improves verbal memory and protects against symptoms of dementia. A natural corollary is that reduced cognitive performance is associated with oestrogen loss during menopause transition. There is also evidence of prenatal programming of both cognitive function and menopause timing. The Medical Research Council National Survey of Health and Development, a prospective cohort study which has followed a representative sample of the British population since their birth in 1946, has tracked the timing of the menopause by annual postal questionnaire in 1572 women, so far until 51 years, and has assessed cognitive function several times in childhood and adult life, most recently in 1989 when cohort members were aged 43 years. The purpose of the present study was to investigate whether cognitive function predicts timing of the natural menopause and, if so, whether the effects became stronger or weaker with the age at which cognitive function was measured. Proportional hazards models indicated a significantly increased hazard of entering menopause at any given age as standardised test scores at 8,11,15, 26 and 43 years decreased. The hazard ratio was strongest at ages 8 and 11 and weaker at older ages. The study has access to a large number of potential biological and social confounders but none attentuated this relationship.These findings raise the possibility that the programming of ovarian steroids influences both the timing of the menopause and cognitive function.

INDIVIDUAL RESOURCES AND ENVIRONMENTAL DEMANDS: THE MEASUREMENT AND MODELING OF DISABILITY IN THE OLDEST OLD.

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Using a model of disability proposed by Verbrugge and Jette, we explored the relationships among functional impairments and limitations, intra-individual factors, and disability severity in a sample of the oldest old. Conceptually, a person was considered disabled when environmental demands (ADLs) exceeded personal resources (physical health, depression, social integration, etc.). We used a population-based sample of 203 individuals aged 80+ living in Sweden. Two waves of data were collected two years apart. Before model testing, we first operationalized the constructs of the disablement model and examined bivariate relations among variables. We then tested a series of cross-sectional path models that proposed relationships among the variables of interest. Results showed 25% with no disability and 42% having severe disability. Among other variables, disease conditions were associated with disability, but are not the main determinant. Results of the main pathway showed functional impairments (vision, grip strength) and limitations (upper & lower body, cognitive abilities) to predict disability severity. Intra-individual factors (depression, social integration, subjective health) also had significant relations with disability severity, controlling for impairments and limitations. We suggest that these resources can offset disability, despite the presence of physical limitations.

THE ROLE OF SOCIO-ECONOMIC STATUS AND ACTIVITIES ON FUNCTIONAL HEALTH AMONG THE ELDERLY

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Functional health decreases with aging. The decrease of functional health is one of the main threats to autonomy. It reduces quality of life, decreases active life expectancy and increases the probability of institutionalization and mortality. Activities are consistently associated in longitudinal studies not only with higher life satisfaction but also with better health and lower rates of institutionalization. Moreover, the relationship between SES and health is well documented in the literature. However, relatively few research have examined the effects of activities on functional health among the elderly. Hence, the objective of this study is to examine the effects of activities and SES on functional health, and the effects of SES on activities. This study is based on the first and third waves of the Australian Longitudinal Study of Aging (ALSA). Structural Equation Models have been used to examine the effects of SES and activities on health. Confirmatory factor analysis has revealed three distinct activity factors in ALSA data. The activity factors are the following: domestic activities, physical activities, and social activities. The results show that physical activities at T_1 decrease functional health problems at T_2 even after controlling for functional health problems at T_1. However, domestic activities at T_1 modestly increase functional health problems at T_2. Social activities have no effect on functional health at T_2. Overall, people with high SES experience less functional health problems, participate more often in physical and social activities and less often in domestic activities.

AGE CHANGES IN LIFE-STYLE AMONG ELDERLY PEOPLE: A LONGITUDINAL STUDY

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The purpose of this study was to describe changes in variables of life-style among elderly people during 20 years (1972-1992). The study group consisted of people born in 1905-06 (136 men, 253 women). The subjects were interviewed six times at the ages of 66, 70, 74, 78, 82 and 86. The results showed that smoking and alcohol consumption decreased during the follow-up period especially amomg men. Physical exercise decreased with age. Hobbies requiring physical activity (travelling, hiking) decreased with age. On the other hand organizational and religious activities remained unchanged or even increased with years. Variables describing socioeconomic status were connected with life-style variables during early retirement. The target group decreased during 20 years.Results were, nevertheless, consistent and at least suggestive.

IMPACT OF CHRONIC DISEASES ON THE ONSET OF FUNCTIONAL DISABILITY.

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Research to understand the relationships between aging, chronic diseases and functional disability is central to the prevention and management of disability, enabling older persons to maintain independence. This study uses data from the Longitudinal Study on Aging to investigate the impact of chronic diseases on the onset age of functional disability. Chronic diseases evaluated included arthritis, cardiovascular disease, diabetes, cancer and osteoporosis. Functional ability is measured by a person's ability to perform activities of daily living (ADL). Survival analysis methods were used to estimate the median age of ADL onset among elderly reporting no ADL disability at the baseline interview (n=3585). People reporting at least one chronic disease (n=2723) had a median time to ADL disability that was 3 earlier than people without chronic disease at baseline (n=862). A three year earlier incidence of ADL disability was found for people having only arthritis compared to people without baseline chronic disease. Arthritis plus additional chronic diseases resulted in a median age to ADL onset six years earlier than people without baseline chronic disease. Similar differences in earlier median ages to ADL disability onset were found for people reporting cardiovascular disease or diabetes. Analyses controlling for baseline age and other diseases, showed that arthritis had the greatest impact on time to ADL onset compared to other chronic diseases. These findings show that arthritis is as devastating as cardiovascular disease or diabetes regarding ADL disability. The management of arthritis merits as serious attention as that given to other chronic diseases.

TRANSITIONS IN FUNCTIONAL STATUS IN LATER LIFE.

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Increasingly researchers are examining changes in disability patterns among older adults. This study explores transitions in functional status among community-dwelling older adults. Baseline socio-demographic and health characteristics related to these transitions are considered.

Data are from in-person interviews with participants in the 1991/92(T1) and 1996/97(T2) Manitoba Study of Health and Aging. The focus here is on 761 respondents who reported no limitations in 7 ADLs and 6 IADLs at T1. Following Anderson et al. (1998), three transitions were considered (independent at T1 and T2, independent at T1 and limited in IADL only at T2, independent at T1 and limited in ADL at T2).

One-third of these older adults experienced a transition in their functional status between T1 and T2. Being older, living with others, rating health as poorer at T1, and having more chronic health problems at T1 were associated with a greater likelihood of becoming ADL/IADL dependent. Implications for service needs/planning are discussed.

SOCIAL CLASS PREDICTS FUNCTIONING AND SELF-RATED HEALTH IN THE OLDEST-OLD

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The increasing number of the oldest-old creates challences both to gerontological research and geriatric care, but their life situation and functional status is still poorly understood. In the Vitality 90+ Study, functional ability, self-rated health, and their predictors were examined in the total home-dwelling population aged 90+ in the city of Tampere, Finland. A self-administered mailed survey was sent to 508 persons and the response rate was 82%. Every second man and two thirds of women lived alone. Two thirds were blue-collar workers by previous occupation, and one third were white-collars or house-wifes. Three in ten could use stairs, four in ten walk at least 400 meters, and six in ten move between rooms without difficulty. One in three reported good, one in two average and one in five poor self-rated health. The three questions on mobility constituted a hierarchical scale. Both mobility and self-rated health were associated with social class also when gender was adjusted for. We conclude, that in good conditions mailed survey may be a feasible method of collecting data in the oldest-old, and that the measures used in epidemiologic studies in younger old ages are useful also among them. Population aged 90+ is very heterogenous, and social class is a strong determinant of health also in this group.

COMMUNITY CONTEXTS AND ADL LIMITATIONS IN OLDER AMERICANS.

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Although numerous studies have demonstrated that individuals' demographic and psychosocial factors influence physical functioning in later life, little is known about the effects of community contextual factors. The purpose of this study is to examine: (1) how community-level social, demographic and health resource factors are associated with the number of ADL limitations among adults aged 70 and over, controlling for their individual factors; and, (2) how those community-level factors moderate the association between individual factors and ADL limitations. Individual-level data are from the Assets and Health Dynamics among the Oldest Old (AHEAD) survey, Wave I (7303 individuals in 198 counties), linked with county-level data from the Bureau of Health Professions Area Resource File. Our multi-level poisson model assumes that ADL limitations are a function of community factors (urbanicity, poverty, racial compositions, availability of medical care and nursing home beds) and individual factors (age, gender, race, socioeconomic status, living arrangement, and health behavior). Overall, the results suggest that variations in ADL limitations across counties are statistically significant, controlling for individual factors. Of interest, counties' proportion of blacks, not individuals' race, is associated with more ADL limitations. Urbanicity, racial compositions, and nursing home bed availability did not directly influence individuals' functioning, but they moderated the effects of individuals' socioeconomic status and living arrangements. The results underscore the importance of considering community contexts as well as individual characteristics in assessing older adults' needs.

CONGRUENCE BETWEEN HEALTH-RELATED BELIEFS & BEHAVIORS.

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An important determinant of engaging in healthy behavior is the perceived effectiveness of the behavior. Such perceptions or beliefs, however, are not always congruent with behaviors. The present study documented patterns of congruence among 169 community-dwelling individuals, considering 11 behaviors and their purpose (i.e., promotion of health vs. prevention of illness). Individuals who, despite believing in the efficacy of a behavior, failed to engage in it were classified as "incongruent" and distinguished from their counterparts who did engage in the behavior. Preliminary correlational analyses indicated very little correspondence among beliefs about the efficacy of health-promotion behaviors. In contrast, many beliefs about the effectiveness of illness-prevention behaviors were significantly correlated. The likelihood of congruence was then assessed and found to be more likely for some behaviors (e.g., avoiding smoking, nutrition) than others (avoiding fatigue, alcohol) and for health-promotion, relative to illness-prevention behaviors. These findings have implications for understanding the links between health beliefs and behaviors, highlighting a need to distinguish between health-promoting and illness-preventing behaviors.

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ENHANCING CONSUMER DIRECTION FOR PEOPLE WITH DISABILITIES: ISSUES OF CHOICE, CONTROL, AND QUALITY OF LIFE

M. Sciegaj (Heller School, MS 035, Brandeis University, 415 South Street, Waltham, MA 02254)
Participants
J.R. Salmon and S.M. Weber (Florida Policy Exchange Center on Aging, 4202 E. Fowler Ave., Tampa, FL). Quality of Life in Three Settings of Long-Term Care: Home, Assisted Living, and Nursing Home.
L.F. Feinberg (Family Caregiver Alliance, 425 Bush Street, Suite 500, San Francisco, CA 94108). Making Hard Choices: Respecting Both Voices
M. Sciegaj and C. Kay (Heller School, MS 035, Brandeis University, 415 South Street, Waltham, MA 02254). Elder Preferences for Consumer Direction.
Discussants
L.Polivka (Florida Policy Exchange Center on Aging, 4202 E. Fowler Ave., Tampa, FL).
J. Capitman (Heller School, MS 035, Brandeis University, 415 South Street, Waltham, MA 02254).

There is growing recognition of the importance of providing elders with opportunities to make meaningful choices in the planning, management, and supervision of community long-term care services. One way to increase opportunities for elders to make meaningful choices about the details of their service use and/or the direction of their own care is to incorporate elements from consumer-directed care models that have proved successful with younger disabled adults. However, there is little empirical data on whether such an approach will work with elders. The three research projects in this session will report preliminary findings on issues of choice, control, quality of life, and consumer directed care. First Salmon & Weber present findings from 68 interviews with individuals who have mild to no cognitive impairment and receive long-term care services in one of three settings of care. The relationship of quality of life to choice of long-term care setting and satisfaction with services is suggested. Second, Feinberg will show how the Family Caregiver Alliance has reconceptualized case management and has made consumer-direction work for people with cognitive impairment and their families. Finally, Sciegaj & Kay will present findings from an 800 person of elders evenly divided across four racial/ethnic groups of African-American, Chinese, Latino, and White Western European-American on their preferences for consumer-direction.

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PROMOTING SUCCESSFUL AGING IN PLACE: THE HOME MODIFICATION ACTION PROJECT

J. Pynoos & J. Overton, USC Andrus Gerontology Center, Los Angeles, CA 90089-0191.
Participants:
J. Pynoos, J. Overton,& F. Omens. (USC Andrus Gerontology Center, Los Angeles) The Importance of Local Coalitions to Increase Home Modification for the Elderly: Lessons from a Demonstration Project.
M. Henke.(USC Andrus Gerontology Center, Los Angeles) Increasing Information Sharing in the Field of Home Modification.
P. Liebig & A. Bovankovich. (USC Andrus Gerontology Center, Los Angeles) Home Modification Policies and Programs: A State-Level Analysis.
R. Duncan. (Center for Universal Design, Raleigh, NC 27695-8613) Advancing the Home Modification Agenda through A National Home Modification Action Coalition.
Discussant:
S. Klein. (Philadelphia Corporation for Aging, Inc., 642 N. Broad St., Philadelphia, PA 19130-3409)

Promoting Successful Aging in Place: The Home Modification Action Project (HMAP) is a three year, multi-faceted effort that began in January, 1997. HMAP consists of four interrelated activities targeting national, state, and local levels to increase the availability of home modifications so that frail older persons can more easily age in place. To achieve this goal, we are: expanding current knowledge, creating new knowledge, and developing ongoing mechanisms that share information, raise awareness about home modifications, develop improved practices and lay the groundwork for future reforms. This session will present original data and outcomes from HMAP's experience over a two-year period as well as findings related to its efforts to: 1) develop a model local home modification coalition for replication elsewhere; 2) use new mechanisms to promote information sharing between consumers and professionals; 3) create a unique compendium of innovative state home modification programs and policies; and 4) sustain and expand the efforts of the National Home Modification Action Coalition.

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OUTCOMES AND IMPLICATIONS OF ASSISTED LIVING IN OREGON: LONGITUDINAL RESULTS

RA Kane, Institute for Health Services Research & Policy, University of Minnesota School of Public Health, Minneapolis, MN 55455.

Participants:

SM Huck. Functional and Health Outcomes.
JR Frytak.. Social and Psychological Outcomes.
CA Levin. Satisfaction and Autonomy.
PC Carder (Institute on Aging, Portland State University, Portland, OR 97207). Inculcating Oregon's Philosophy of Assisted Living
RA Kane Looking to the Future: Trends, Issue, challenges.

Discussant.

R Mollica. National Academy for State Health Policy, Portland, ME.

Assisted Living (AL), as licensed in Oregon since 1990, is a fast-growing, apartment style, single-occupancy care setting, where people with functional impairments can receive personal care and routine nursing under conditions that emphasize privacy, dignity, independence, choice, and normal lifestyles. Those with nursing-home levels of impairment and financial eligibility may be covered for the service components of AL through Medicaid. In July 1995, the University of Minnesota enrolled a sample of 605 AL residents (1/3 of the then-population of 38 ALs) and 610 NF residents (2/5 of the census of 31 randomly selected NFs). Data was derived from interviews with residents or their proxies and abstracts of medical and business records. Presenters will describe outcomes by setting over time for: health and physical functioning (Huck), social and psychological functioning (Frytak), and satisfaction and autonomy (Levine). All outcome analyses are case-mix adjusted with selection correction to control for the probable selectivity bias that would lead a resident to chose an AL versus a NF. Presenters describe both measurement development and substantive results in each outcome area. The evaluation also included a comprehensive multifaceted qualitative study, including: interviews with about 45 administrators (with newer ALs also included); telephone interviews with key stakeholders; a special study of the care coordination function for AL residents; a special study of "managed risk contracting; a discharge study at the facility level; and a study of how the advent of AL affected supply, utilization, and price of other LTC services in selected market areas. From this component, Kane will identify key trends, problems, and issues in AL in Oregon. From a separate qualitative study, Carder will describe special challenges in inculcating Oregon's AL philosophy. Robert Mollica will serve as discussant, putting the findings in the context of his own national study of AL regulations in 50 states.

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RURAL INEQUITIES IN IN-HOME SERVICES: ENIGMAS AND ECLIPSES

E. Porter, S424 Sinclair School of Nursing, University of Missouri-Columbia, Columbia, MO 65211

Participants:

E. J. Porter & L.H. Ganong (Sinclair School of Nursing, University of Missouri-Columbia, Columbia, MO 65211) Having a "Can-Will-Doer": The Phenomenon and its Variations Among Older Rural and Non-Rural Widows
J. M. Armer, E. J. Porter, L. H. Ganong (Sinclair School of Nursing, University of Missouri-Columbia, Columbia, MO 65211) The "Church Family" and Kin: Contrasts in the Service Providers of an Older Rural African-American Woman
W. J. McAuley (University of Oklahoma Health Sciences Center, Oklahoma City, OK, 73190) Covenants of Care: The Symbols and Conduct of Community Assistance by and for Elders in the Rural All-Black Towns of Oklahoma.
B. Hendrick & R.J. Maiden (Allegany County Office for the Aging; Alfred University, Alfred, NY 14802) In-Home Services for the Rural Elderly – An Initial Study.

Discussant:

J. A. Krout (Gerontology Institute, Ithaca College, Ithaca, NY 14850-7188)

Access, eligibility, and cost effectiveness are considered barriers to rural elders' use of in-home services, contributing to rural-urban inequities. In this symposium, such issues are labeled "enigmas of equity." To garner ideas about eclipsing these enigmas, it is essential to understand older rural adults' experiences with in-home services. Accordingly, the papers are focused upon some puzzling phenomena of older rural adults' in-home service use and potential eclipses to such enigmas. An urban-rural comparison of "having a can-will-doer" is in counterpoint to the typical circumstance of insufficient support due to kin's rural exodus. The uniquely personal enigmas that an African-American woman experienced with home care are described. Finally, prototypes are presented of culturally-based and programmatic solutions to the enigmas of equity. The unique covenants basic to rural elders' in-home assistance in all-Black communities are described, and some outcomes of an in-home program for Medicaid-ineligible rural elders are highlighted.

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THE POLITICS OF PUBLIC POLICY FOR OLDER AMERICANS: HOW THE CONTEXTS ARE CHANGING

F. L. Cook, Institute for Policy Research, Northwestern University, 2040 Sheridan Road, Evanston, IL 60208.

Participants:

T. R. Marmor (Yale University, New Haven, CT 06520) The Changing Politics of Medicare.
F. L. Cook (Northwestern University, Evanston, IL 60208) The New Politics of Social Security.
E. A. Kutza (Portland State University, Portland, OR 97207) Waivers and the Politics of Long Term Care Policy.
C. L. Estes & K. W. Linkins (University of California, San Francisco, CA 94118) The Politics of Long Term Care: A Study in Reform.

Discussant:

R. B. Hudson (Boston University, Boston, MA)

The twentieth century has witnessed the rise of the American welfare state--in particular, the development and incremental growth of a range of social programs for older persons. However, as the century draws to a close, many of the ideas and values that undergird the foundations of these programs are under attack, and the climate appears hostile for systematic policy attention directed to the development of new national programs. To understand what is happening, this symposium will examine the changing politics of policies for older Americans, focusing closely on Social Security, Medicare, and long term care. Special emphasis will be placed on the ways that changing demographic, economic, ideological, and political party contexts affect the politics of public policies for older Americans.

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WOMEN AND EMOTIONS: INTERDISCIPLINARY PERSPECTIVES.

V.H. Bedford, Department of Psychology, University of Indianapolis, 1400 E. Hanna Ave. Indianapolis, IN 46227.

Participants:

Mary F.Wyman (Department of Psychology, Indiana University, Bloomington, IN 47405) Issues in the Assessment of Depression in Older Women.

V.H.Bedford (University of Indianapolis) P.S.Avioli (Psychology Department, Kean University, Union, New Jersey 07803). Patterns of Stability and Change in Women's Feelings Toward Sisters.

K.L. Fingerman & S. M. Kleinbaum (Department of Human Development and Family Studies, Penn State University, University Park, PA 16802) The Downside of Women's Family Relationships.

S.Squire (Department of English, Penn State University, University Park, PA 16802) Gender, Aging and Envy: Fantasies of Action.

Discussant:

L.E.Troll (University of California Medical Anthropology Program, San Francisco, CA 94143)

Whether to their detriment or advantage, women have been associated with the emotional, nonrational domain of experience. The focus of women's affect in gerontology tends to be limited to relationship burden and social support. We offer more breadth by drawing on clinical, human development, social-psychological, and literary perspectives. Using single-gender studies and cross-gender comparisons, we expand this inquiry into a variety of women's emotional experiences, such as (1) late life depression, (2) gender transcendence in later life relationships, (3) ambivalence toward family members, and (4) envy.

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THE USE OF INFORMAL NETWORKS IN THE PROVISION OF IN-HOME RESPITE FOR CAREGIVERS OF COGNITIVELY IMPAIRED ADULTS.

C.J. Whitlatch, Benjamin Rose Institute, 850 Euclid Ave., Cleveland, OH 44114 & L.F. Feinberg, Family Caregiver Alliance, San Francisco, CA 94108.

Family caregivers often call upon the assistance of both formal and informal networks to help lessen the stress of providing care to cognitively impaired relatives. Few studies, however, have examined the experience of caregivers who, when given the choice, prefer to hire family or friends rather than professional workers. This study examines the in-home respite experience of family caregivers served by California's Caregiver Resource Centers using: 1) the "agency-based" program in which caregivers purchase hours from home care agencies under subcontract with CRCs (n=52), or 2) the "direct pay" program where caregivers use vouchers to hire and manage their own workers (n=116). This paper explores: 1) the characteristics of caregivers who choose to hire informal network members to provide in-home care, 2) their satisfaction with services and quality of care, and 3) utilization and cost issues. Findings reveal that, compared to caregivers who do not choose to hire family or friends, caregivers who do hire from their informal networks are more likely to be women, less likely to be employed full time, have lower annual household incomes, more satisfied with respite, and have significantly lower unit costs for respite. Implications will be discussed for both practice and program development.

LEGISLATIVE RELIEF: THE CAREGIVERS INVESTMENT BILL Edward F. Ansello, Virginia Center on Aging, Virginia Commonwealth University, Richmond, VA 23298-0229.

Family caregiving accounts for the vast majority of chronic care to disabled adults in the U.S. The spread of managed care schemes is likely to restrict access to health services for those requiring long-term care and to increase reliance on the under-supported resource, the family. At the same time policy initiatives to reinforce or upgrade the capacities of caregiving families have been sporadic at best. Families tend not to be targeted for training by Area Health Education Centers, Geriatric Education Centers, or the variety of programs for all-inclusive care for the elderly. This paper reports an unusual initiative in legislative relief for families providing chronic care. The Caregivers Investment Bill, HB 751, of the 1998 Session of the Virginia General Assembly provides a $500 tax credit for low- and moderate-income caregivers assisting relatives with 2 or more ADL impairments. In Virginia $500 will buy several weeks of home delivered meals or home health aide visits, increasing the likelihood of postponed institutional care. This paper reports the Bill's gerontological roots, the path of its sponsorship in the General Assembly, and its successfully persuasive rationale for legislative approval.

PERSPECTIVES ON FAMILY AND NON-FAMILY PROVIDERS OF IN-HOME CARE

Ruth E. Matthias, A.E. Benjamin, Todd M. Franke, Ellen Park

Within California's In-Home Supportive Services Program (IHSS), the largest provider in the country of client-directed personal assistance services for low-income people with disabilities, many clients hire family members as paid personal assistants. As part of a HHS/ASPE-funded study of client-directed and agency models of services, we conducted telephone interviews with a statewide random sample of 274 elderly clients in IHSS's client-directed model, 51.5% of whom had family members as paid providers in the program. The study examined client outcomes in several areas: service experience; safety; empowerment; unmet needs; satisfaction; and quality of life. On several dimensions of client safety, empowerment, satisfaction, and quality of life, the data suggest that clients with family providers have more positive outcomes than clients with non-family providers. These differences persist even when controlling for demographics, severity, and program-non-program resources. The limitations of the findings will be discussed, as will their implications for controversial state and federal policy regarding public payment for supportive services provided by immediate family members and other relatives.

PATTERNS OF USE AND PAYMENT FOR INFOMAL AND FORMAL ASSISTANCE

J. H. Skinner, Department of Gerontology, SOC 107, University of South Florida, Tampa, FL 33620

Much has been written about the phenomenon of informal and formal social supports for frail elderly persons. However, little is known about the payment for these helping services and the most likely patterns of paid help. This study uses data from the 1990-1991 National Survey of Self-Care and Aging (3,467 older persons) and examines patterns of informal and formal help on 18 activities. Data were collected on any help given by spouses; relatives; friends or neighbors; volunteers or laypersons; health or social service workers; and live-in facility personnel on each of the 18 activities. In addition, data were collected on the payment for the help received. Factor analysis of the 18 activities resulted in three categories of dependent variables: payment for ADL, IADL, and strenuous housework assistance. Chi Square Automatic Interaction Detection (CHAID) analysis on the U. S. population weighted sample revealed several interaction effects associated with payment for help. Surprisingly, help from volunteers/laypersons best explains payment for many of these services. In addition, extensive helper networks also tend to include paid helpers. The data reveal that we must re-examine the traditional notion that informal help is unpaid. The paper will also examine effects of gender, age, race, class, and income on the patterns of use of paid and unpaid helpers. The implications of these findings for practice and public policy will also be discussed.

CAREGIVING EXPECTATIONS AND PREFERENCES AMONG MIDDLE-AGED AND OLDER MEXICAN AMERICANS.

I. Gonzalez, E. Bastida, S. Gobburu, I. Cuellar, G. Gonzalez, Minority Biomedical Research Support Program, The University of Texas-Pan American, Edinburg, TX 78539.

This study examined caregiving normative expectations and preferences among an age stratified random sample of middle aged and older Mexican Americans. A total of 850 Mexican Americans between the ages of 45 and 78 years were queried on their ideal and real caregiving perferences. Contrary to ordinarily held assumuptions about Mexican Americans familial patterns of support and reciprocity, particularly during old age, approximately 82% of the sample, regardless of age, preferred to receive care from a professional rather than from a family member. The younger among the sample, those between 45 and 56 years old, also perferred their parents to receive professional care, whenever necessary. Children and spouses were chosen second and third with few, less than 8%, indicating that they expected their grandchildren to provide some caregiving whenever it became necessary. Among those receiving care, over half received professional care from a home health agency. These patterns persisted when controlling for urban or rural residence.

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IMPACT OF TYPE AND SEVERITY OF DEMENTIA ON HOSPITALIZATION AND SURVIVAL IN THE ELDERLY

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Dementia is associated with increased morbidity and mortality. It is unclear the role of coexisting diseases, and whether this differs in patients with Alzheimer's disease (AD) or with vascular dementia (VaD). We examined comorbid conditions and evaluated the impact of severity of dementia on hospital use and mortality of patients in each group. Data were from the SAGE database which includes 350+ items (collected with the Minimum Data Set) on all residents admitted to ~1,500 facilities in 5 U.S. states, between 1992-1995. Prevalence of comorbid conditions was adjusted for age, race and the level of cognitive impairment. Data on death and hospitalization were from the Medicare claims files. We identified 23,820 AD and 78,434 VaD patients aged 65+. AD patients were younger, and more likely to be female and Caucasian. At comparable levels of cognitive impairment, AD patients showed fewer comorbid conditions (2.3±1.7 vs 2.9±1.8 for VaD patients), including those not risk factors for the latter. For each medical diagnosis AD patients received fewer drugs relative to VaD patients (5.3±4.3 and 6.1±4.6, respectively). Overall, 34 and 26% of patients were hospitalized or died. AD patients had decreased 1-yr hospitalization rate relative to VaD patients, and this was inversely associated with dementia severity only among the former. VaD died at an increased rate than AD patients, and this correlated with dementia severity in both groups. These findings support the hypothesis that AD patients may be a healthier group of patients.

DO CLINICIANS, FAMILIES AND PERSONS WITH DEMENTIA SHARE THE SAME GOALS OF CARE?

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Agreement on goals of care is important to developing, implementing, and adhering to an appropriate plan of care. However, the level of agreement on goals of care among clinicians, families, and persons with dementia is not well understood. The purpose of this study was to assess the degree to which clinicians, families, and persons with dementia agree on goals of care.

Consecutive new patients (n=84) presenting to the Adler Geriatric Assessment Center at Yale-New Haven Hospital were enrolled in the study. Patients (with Folstein MMSE score of 18 or greater), their family caregivers, and their physicians were interviewed after the patient assessment, using semi-structured interviews to assess goals in 6 domains: day-to-day functioning, safety, behavior and emotional health, social support, caregiver stress, and medical condition.

Day-to-day functioning was chosen as the most important goal more frequently than any other goal by patients (42.4%), family caregivers (32.1%), and physicians (32.6%). However, agreement on the most important goal was poor between family caregivers and physicians (kappa = 0.26) and between patients and physicians (kappa = 0.08). Family caregivers and physicians agreed on the most important goal in 44% of cases; patients and physicians agreed in 31% of cases; and agreement among family caregivers, patients, and physicians occurred in only 17% of cases.

The research demonstrated that patients and families often disagree with clinicians about the goals of care for individual patients, even after participating in a lengthy assessment process. Explicit consideration of goals may facilitate shared targets for clinical care, enhanced participation of patients and families in the process of care, and potentially improved outcomes of care.

FLORIDA'S INNOVATIVE APPROACH TO ALZHEIMER'S DISEASE: EVALUATION FINDINGS ON COST, USE, BURDEN AND EXPERIENCE

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A decade ago, Florida created the Alzheimer's Disease Initiative, which integrated diagnosis, research including a brain bank, respite and day care, and training into a single endeavor. This design is unique in the nation. Three major databases contain client-level demographic, assessment, service utilization and expenditure data. Nine memory disorder clinics and respite and day care programs in 67 counties serve over 5,000 people each year. The evaluators analyzed three statewide databases to determine cost and utilization patterns, conducted a survey of 600 caregivers, conducted site visits and collected documents to form the body of analysis. Major findings addressed services, caregiver outcomes, research, utilization and cost, and other factors. Caregiver burden was reduced in 73% of caregivers, and worsened in only 5%; the research funds have helped leverage large federal research projects, and research has helped identify possibilities for preventive action. Costs of caring for people with Alzheimer's Disease and Related Disorders in Florida are spread among several programs, but the ADI serves the most impaired group. The average score for cognitive impairment (Short Portable Mental Status Questionnaire) was 24 of a possible 28; half had the maximum score. The majority of ADI clients are in the high risk of nursing home placement category. Clients receive about 2.5 hours of case management in a month, and either 80 hours of day care or 27 hours of in-home respite in a month through the ADI.

FOOD AND NUTRITION PROBLEMS OF INDIVIDUALS WITH DEMENTIA IN THE HOME SETTING: THE PERSPECTIVE OF THE FAMILY CAREGIVER

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While the nutrition literature describes the food and nutrition problems of institutionalized dementia patients, limited attention has focused on the types of problems encountered by family members providing in-home care. Because informal caregivers provide the majority of care in the home, research is needed that explores the nutrition problems and concerns of these caregivers. The purpose of the present study was to determine the major food and nutrition problems of individuals with dementia in the home setting as perceived by their family caregivers. Twenty-two tape-recorded semi-structured interviews were conducted with family caregivers of individuals with dementia in their home or in another convenient location using the grounded theory approach. All tapes were partially transcribed focusing on issues involving food and nutrition. Major themes were grouped and categorized. The major themes included: 1) issues related to memory problems (difficulty recalling food intake, forgetting about other diet restrictions, difficulty making food choices, requiring prompting to eat); 2) physical problems (difficulty swallowing and chewing, problems feeding self); 3) physiological problems (weight loss, weight gain, constipation, decreased sense of taste, hydration concerns); and 4) issues of food modification, selection, and intake (preference changes, cravings for sweets and salt, not eating enough, feeling overwhelmed with large meals). Implications of the present findings for increasing understanding of how caregivers perceive and deal with nutrition-related problems will be discussed.

ALZHEIMER MEMORY TRAINING: LONG-TERM RETENTION ACHIEVED

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Two months after completion of ten weekly 20 minute training sessions, five early to moderate Alzheimer's patients recalled 54-95 percent of the 7 to 13 personal facts they learned or relearned during training, which used tape-recorded biographical narratives and interactive quizzes. Training tapes were made and administered by undergraduate "independent study" students under an NIA-funded research and training grant. Students also supervised their partners in physical fitness training and community volunteer work, and administered language stimulation exercises. Session will demonstrate the memory training method and provide handouts with detailed instructions and sample scripts for memory tapes. Method has been subject of prior published research with 15 AD patients, only two of whom failed to learn. This is the first study that measured longterm retention of learned or relearned material. Information on the use and the making of memory books, useful as a conversation "prosthesis" for memory-impaired individuals,will also be presented.

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HEALTH-PROMOTING BEHAVIORS OF OLDER ADULTS FROM THE FORMER SOVIET UNION

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Older adults who have recently immigrated to the U.S. from the former Soviet Union face many cultural barriers to accessing health services. Constraints include language difficulties and lack of knowledge of health promotion practices. The purpose of this study was to examine other factors that predict health behaviors among Russian immigrants using the Health Promotion Model (HPM: Pender, 1982). While this model has been used to explain the behaviors of some American older adults, few cross-cultural studies have been conducted. A sample of 104 Russians over age 60 who had arrived in the U.S. since 1988 completed a written survey (translated into Russian and back-translated). The outcome variable was the frequency of self-reported health-promoting behaviors such as exercise, nutrition, and visiting health professionals. Results showed that subjects' health-promoting behavior was predicted by their definition of health, their perception of control over their health, their perceived self-efficacy, their age, and their level of acculturation ($R2=.457$, $p<.001$). Participants who were older, had high levels of self-efficacy, were more acculturated, and perceived control over their health reported performing significantly more health-promoting behaviors. Implications for designing culturally appropriate health services and research will be discussed.

THE USE OF OUTPATIENT CARE BY MINORITY VETERANS: FINDINGS FROM THE NATIONAL SURVEY OF VETERANS

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The National Survey of Veterans (NSV) was conducted by the Department of Veterans Affairs (DVA) in 1993 to obtain military, economic, health, and service use information on a random sample of 11,620 U.S. veterans. This study used the NSV database to describe racial/ethnic variations in utilization of outpatient care for both users and nonusers of VA services.

Sixty-eight percent of the total sample (n=8,015, mean age=56 years, 96% male) reported using outpatient care in 1992. The racial/ethnic breakdown of outpatient users was 84% White, 9.6% Black, 3.8% Hispanic, 0.8% American Indian, and 0.5% Asian/Pacific Islander (A/PI). There was a significant association between race and type of outpatient care use (e.g. VA only, non-VA only, or both) (chi-square=274.4, p=.001). Forty-six percent of Blacks were VA only users, followed by 37% Hispanic, 32% American Indian, 24% White, and 17% A/PI. A larger proportion of A/PIs (67%) were non-VA users as compared to the other racial/ethnic groups. The Black and Hispanic groups had the largest proportion of veterans who used both VA and non-VA sources of outpatient care simultaneously. There were also significant differences by racial/ethnic group in the mean number of outpatient visits made per year (p=.05). American Indians had the highest number of outpatient visits (mean=21) and Whites had the lowest number of outpatient visits (mean=11). Factors contributing to differences in outpatient utilization included military status, health status, and demographic variables. Funded by DVA, Health Services Research and Development Service.

AWARENESS OF COMMUNITY SERVICES AMONG ELDERLY LIVING IN RURAL RESORT AND NON-RESORT AREAS.

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Many Japanese elderly are permanently moving to newly developed resort areas. Seniors may learn of services in their community through contact with friends and community organizations. As seniors who relocated into a new resort area may not have such personal ties, their knowledge of community services is likely to be lower than those who have remained in older rural communities. Based on matched random samples of 400 persons aged 65 and over, this study compares the level of awareness of community services of 252 elderly living in a resort area with that of 270 elderly living in a rural non-resort area, and models predictors of service awareness. Our principal dependent variable, awareness level, was measured by respondents' familiarity with 11 services. Predictor variables included age, sex, educational attainment, length of residence, social ties and health status measures. Social ties were classified into three categories: co-resident family members, closeness to neighbors, and frequency of participation in community groups. Controlling for differences in sex and age, OLS regression showed that respondents in the resort area had lower levels of awareness of services than those in the non-resort area. Although those in the non-resort area with wider social ties were significantly more likely to be aware of a greater number of services, the extent of social ties for resort respondents had no significant impact on awareness level. Difference in length of residence for respondents in the two ares was, however, a significant factor in explaining awareness. Our findings lead to a conclusion that elderly in new resort areas obtain community information through non-traditional channels. The way elderly in new rural resort areas differ from their peers in older rural areas suggests important implications for policy.

RACIAL AND ETHNIC DISPARITIES IN THE EFFECTS OF INSURANCE COVERAGE ON IMPORTANT HEALTH OUTCOMES

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Historically, research has shown that health insurance coverage is a positive predictor of important health outcomes. There is also conclusive evidence that racial and ethnic minorities are more likely than whites to have poor health, and that Hispanics and Latinos especially have lower coverage rates than non-Hispanic blacks or whites.

Our study uses data from the Health and Retirement Survey (HRS) which oversamples for Hispanics and blacks, to examine the effects of health insurance coverage on important health outcomes, including hospitalization, self-rated health, physician visits, and self-care, within the context of race and ethnicity. Initial results demonstrate that the insured are 1.5 times more likely to be hospitalized than the uninsured (O.R.= 1.47; C.I. 1.23,1.73) and that non-Hispanic blacks are 1.5 times more likely to be hospitalized than are whites (O.R.=1.58; C.I. 1.38,1.78). Hispanics were not found to differ significantly in hospitalization from either whites or non-Hispanic blacks.

Our results demonstrate, however, that for Hispanics insurance status plays a critical role. For example, a significant interaction was found between Hispanic race and insurance status, whereby, after controlling for age, sex, education, and preexisting comorbid conditions, insured Hispanic were 2.5 times more likely to be hospitalized than uninsured Hispanics (O.R. 2.51;C.I. 1.77,3.26).

Results suggest that policy-makers may need to be attentive to the differential effects of insurance coverage on a racially and ethnically diverse population.

THE ROLE OF ETHNICITY IN THE QUALITY OF LIFE OF JAPANESE AMERICAN WOMEN IN BOARD AND CARE HOMES.

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Research on resident/family perceptions of quality of care and satisfaction in Board & Care (B&C) homes, has been sparse and no evaluations of ethnic-specific homes have been attempted. This study compares Japanese American (JA) residents living in JA B&C homes with those in non-Japanese homes and assesses the influence of the homes' ethnic features on perceived quality of life.

This qualitative study included personal interviews with: JA women living in Japanese (Jpnz) and mainstream B&C homes; family members; and administrators to identify the extent to which the homes' ethnic characteristics influence care and satisfaction. Unobtrusive observations of resident/staff interactions and behaviors were also done.

The primary ethnic features of Jpnz homes were Jpnz language, food, and staff. Jpnz homes were otherwise heterogeneous in size, case mix, cost, activities, licensure, etc. Non-Jpnz homes were often run by other Asians (e.g., Filipino, Chinese). Dimensions of satisfaction and quality of care differed for residents and family members and were more universal rather than ethnic-specific. Residents often placed greater importance on invisible routine life process domains such as boredom, privacy, staff attentiveness, & socialization. Family members tended to emphasize more visible structural aspects of the homes such as cleanliness, home-like atmosphere, food, & space. Jpnz homes appeared most salient for monolingual Jpnz-speaking residents.

INVOLVING MINORITY POPULATIONS IN THE RESEARCH PROCESS: AN COMMUNITY & ACADEMIC PARTNERSHIP.

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Community and academic partnerships have been espoused as a means of increasing minority recruitment for research. Data are lacking, however, to inform the academic community on how to build such partnerships. By establishing recruitment as their most important goal, institutions fail to respond to the full range of problems limiting minority involvement in research.[i,ii,iii,iv] The need for studying variation by race and ethnicity has been documented, yet minority populations are often underrepresented in research.[iii] Among barriers identified are distrust, the Tuskegee Syphilis Experiment, economics, lack of access, physician fear of losing patients, strict exclusion criteria, cultural beliefs or myths about illnesses, discrimination, illiteracy, and transportation. This paper will report on the University of Pennsylvania Institute on Aging's (IOA) unique approach to addressing these issues by working collaboratively with community leaders and members to establish a partnership to involve the community*not only* in recruitment but also the planning and conduct of research and sharing of results. Key elements include: interviews with community leaders, clergy, health care providers and researchers; a retreat of 62 community and university representatives; and formation of a Steering Committee of community and university representatives leading the development of a concrete partnership as well as ideas for future initiatives including bi-directional educational, and community involvement in the research process, methods of getting community advice and feedback.

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Strategies for the Recruitment of African-Americans in Psychosocial Research

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Despite a call from the federal government for increased diversity in research the representation of African-Americans in behavioral research remains low. As part of a larger study focusing on emotional and personality development, we recruited African-Americans to participate in group discussions about their experience with stress and coping across the life span. Several methods were employed to ensure a high rate of African-American participation in this study. However, the most successful strategy included the establishment of a partnership between the research institution and a person in an African-American organization or institution who would be willing to disseminate information to organization members. Suggestions and guidelines for future recruitment of African-American participants in behavioral research are discussed in this paper.

DIVERSITY AND COMMUNITY INVOLVEMENT IN SENIOR HOUSING: A CASE STUDY.

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This study investigated factors contributing to the decline of resident involvement in community activities in a subsidized senior housing high-rise building. Resident perceptions of the community, its diversity, and the level and quality of their social interaction both within and beyond the building were examined through written questionnaires in English, Chinese, and Spanish (N=136; response rate, 56%); focus groups conducted in English and Chinese; and interviews. Results indicated that residents were generally satisfied with their current levels of social interaction and comfortable with the diverse resident population. The majority reported that at least half of their friends and volunteer activities were outside the building. There were few differences across groups, but Chinese-speaking residents had signficantly lower satisfaction rates with the community than English- and Spanish-speaking ones. The focus groups and interviews revealed that residents from various ethnic backgrounds tended to have different expectations of community involvement. Possible explanations and recommendations for increasing resident involvement and satisfaction will be discussed.

HEALTH CARE NEEDS AND UTILIZATION AMONG RUSSIAN-SPEAKING ELDERLY IMMIGRANTS IN THE UNITED STATES.

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This study presents results from a survey conducted with 300 Russian-speaking immigrants aged 60 and over, currently living in the Boston area. The purpose was to investigate their health-care needs and their patterns of health service utilization. The results suggest that this group of elderly immigrants has a high prevalence of chronic conditions and physical limitations, extremely high levels of depressive symptoms, and a rare combination of poverty, high educational attainment, and severely limited command of the English language. Our preliminary comparisons of demographics, health status, health care utilization, and health behavior patterns between the study sample and the general population statistics interesting differences. This study also offers data on the prevalence of self-medication in this population with drugs imported from the former Soviet Union, as well as the use of folk and alternative medicine.

The findings provide important information for future planning of public health initiatives for this unique group of elderly immigrants.

THE PERCEPTIONS OF HISPANIC AND NON-HISPANIC AD CAREGIVERS.

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Few studies have examined the experiences of Hispanic AD caregivers and the limited inclusion of such subjects is explained by their under-utilization of formal resources and extensive reliance on informal caregiving. To address this dearth of information on the experiences of Hispanic caregivers, a study was undertaken of a sample of Hispanic (N=55) -- 90% of whom were Cuban-Americans -- and Non-Hispanic (N=34) caregivers seen at an AD and Memory Disorder Center in Miami Beach, FL. Data was collected on caregivers' perceptions of their mental and physical health conditions, vitality, and well-being. A 36-item health condition survey (translated into Spanish) was used to determine whether or not there were differences in caregiving consequences between the two groups. Hispanic caregivers were significantly younger and less educated than their Non-Hispanic counterparts. Although caring for more impaired AD relatives, the Hispanic caregivers had higher vitality scores. There were few other significant differences in demographic characteristics and dependent variables between the Hispanic and Non-Hispanic caregivers. Yet, within both groups significant differences were found with regard to gender, relationship to patient, and age, leading to the conclusion that ethnicity is less important than other considerations with regard to the consequences of the caregiving experience.

AFRICAN AMERICAN GERONTOLOGY NETWORK.

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African American gerontologists tend to focus on issues concerning older African Americans. However, these professionals often report feeling as isolated as the population they serve. In response to this sense of isolation, an African American Gerontology Network (AAGN) was formed in Michigan in 1993. This organization unifies students, vendors, organizations and professionals interested in meeting the needs of older African Americans. The following four objectives form the organizing framework for AAGN: 1) to work toward improving the quality of life for older African Americans; 2) to foster the development of an infrastructure providing access to services available from the public and private sectors; 3) to promote networking among people with an interest in gerontology who can serve as sources of information exchange and professional support to each other; and 4) to encourage the promotion of programs, policies, research, and services for older African Americans. In carrying out these objectives, AAGN members provide technical assistance to others, institute social functions, and provide forums for minority speakers from local health and human service agencies. Thus far, the technical assistance provided by AAGN has resulted in the awarding of two major National Institute on Aging Center grants to local institutions in which AAGN members conduct research, while the social functions given by AAGN have provided opportunities for networking among members. The informational forums supported by AAGN have provided an avenue for sharing pertinent information related to policies, programs and services for older adults.

GENERATIONAL EQUITY AS A LOCAL ISSUE: AN INVESTIGATION INTO THE LINK BETWEEN MENTORING AND SCHOOL BOND VOTING BY THE ELDERLY

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Over the past two decades academic journals and the popular media have been saturated with reports of a so-called "generational war," with reports of conflict between generations for limited government resources. Such debates also occur at the local level, where competition for funding focuses on whether or not to finance elderly housing or school infrastructure, or to build senior centers instead of youth recreational facilities. This research project explores the relationship between older persons' participation in a mentoring program and their voting behavior in municipal referenda aimed at assisting children. Data was gathered from participants of a mentoring program and from a control group of non-participants via a mail survey. Information reported will include standard demographic data, family characteristics, and attitudes toward municipal funding of programs designated for children. Logistic regression is used to measure the association between mentoring by the elderly and their likelihood of voting for municipal investments intended to benefit children.

Older Migrants in the Federal Republic of Germany

In Germany we observe a cultural differentiation of the aging population. This is mainly due to the growing number of older migrants especially from Turkey and southern European countries - the so-called „Gastarbeiter“ or „guestworkers“ and their families who were officially recruited between 1955 and 1973 in order to remedy an existing labour shortage in those years. The presentation will focus on (1) basic empirical data about older migrants in Germany (e.g. structure, gender, marital status), (2) reasons why - against all expectations - older „Gastarbeiter“ do not return to their native country after they retire, (3) information on living conditions of older migrants (e.g. income, housing, social networks, problematic life situations) and (4) measures which have already been implemented in order to meet the specific needs of older migrants in case they need help or care (e.g. special care services, departments in homes for the elderly) respectively which experiences have been made for far. (5) Based on these pieces of information corresponding strategies will be developed. The paper is based on own empirical research material.

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THE EXTENT OF CONGRUENCE BETWEEN DISABLED ELDERS AND THEIR FAMILY MEMBERS.

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While there has been extensive research from the perspective of family caregivers, relatively few studies have gathered data from dyads, including the disabled elder.

This poster draws on data from a research/demonstration which implemented and evaluated a family-based model of rehabilitation for elders with vision impairment. Both the elder and their primary relative/friend were interviewed at pre and post service. Baseline data on 117 dyads were examined to identify the degree of congruence in elder and family perceptions regarding: (1) elder's degree of disability; (2) elder's psychosocial status; (3) family reactions to elder's vision impairment; and (4) assessment of adequacy of the help available to the elder. Analyses used t-tests for dependent samples. Findings point to significant dissimilarity in perceptions in most domains, although not in a consistent direction. Family/friends reported significantly higher ADL disability and tended to report greater functional vision problems (p=.06) than did the disabled elder. They were also significantly more likely to rate the help available to the elder as inadequate. Similarly, family/friends had more negative ratings of the elder's life satisfaction and adaptation to vision loss, compared to elder self-ratings. On the other hand, family/friends had significantly more positive attitudes towards aging and vision loss than their visually impaired relative, but perceived themselves to be more overprotective than did the visually impaired elder.

This lack of congruence has critical implications for family-based services and rehabilitation, which are discussed.

Funded by the AARP Andrus Foundation

MEASUREMENT AND CORRELATES OF FAMILY CAREGIVER SELF-EFFICACY FOR MANAGING DEMENTIA.

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Chronic disease management by older adults is frequently studied within the framework of health-related self-efficacy, which is the belief that action can be taken to address health problems. In contrast, little is known about family caregiver self-efficacy for managing relatives' chronic health problems. In this study, we developed a new measure of family caregiver self-efficacy for managing dementia, based on caregivers' self-reported symptom management and support service access capabilities. We also hypothesized that caregiver self-efficacy would be positively associated with the quality of physician advice to caregivers about dementia management, and positively associated with caregiver health and well-being. Telephone interviews were completed with 197 family caregivers who called a local Alzheimer's Association help line (mean age=55.6±13.7 yrs; 82% female; 18% African-American). We found that a 9-item dementia management self-efficacy measure represents a single factor with high internal consistency reliability (Cronbach's alpha=0.81) and adequate criterion validity (r=0.47 with Pearlin's helper competence scale). Scores range from 9-90; in this sample the mean score was 58.7±18.5. Controlling for caregiver characteristics, severity of relatives' dementia symptoms, and amount of physician contact, we found that the quality of physician advice predicted caregiver self-efficacy (beta=.32, p=.0001), and that caregiver self-efficacy, in turn, predicted caregiver health and well-being, as measured by the Hopkins symptoms checklist (beta= -.33, p=.0001). We conclude that this new measure of caregiver self-efficacy for managing dementia has strong measurement properties, and that it will be a useful tool in applied research designed to improve dementia care by families and physicians.

CAREGIVER OBSERVATIONS AND PSYCHOMETRIC ESTIMATES OF FINANCIAL CAPACITY IN PATIENTS WITH ALZHEIMER'S DISEASE

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Although caregivers are frequently called upon to estimate functional capacities in Alzheimer's disease (AD) patients, little is known about the accuracy of these estimates. The present study compared caregivers' estimates of financial capacity (FC) with the patients' actual performance on psychometric tasks of FC in nineteen patients diagnosed with mild or moderate AD (NINCDS-ADRDA criteria). AD patients and their caregivers completed, respectively, psychometric measures of FC and a questionnaire concerning the patients current FC. In the AD patients, FC was measured using the Financial Capacity Instrument (FCI), a prototype instrument which assesses FC across a series of clinical domains. Assessed in this study were basic monetary skills (Domain 1), cash transactions (Domain 2), check management (Domain 3), and bank statement management (Domain 4). The relationship between the caregiver observations of impairment and FCI impairment was examined for the entire sample and by dementia level using chi-square analysis revealing no statistically significant differences ($p < .05$). The percentage agreement between caregiver observations and FCI performance for mild AD patients ranged from 33% (Domain 2) to 58% (Domains 3 and 4). However, the percentage of agreement between caregivers and moderate AD patients ranged from 86% (Domains 1 and 2) to 100% (Domains 3 and 4). The majority of caregiver observation errors were optimistic; i.e. caregivers typically judged the patient to be financially capable when their FCI performance suggested otherwise. These results suggest that: (1) caregivers tend to overestimate AD patients' FC, and (2) caregivers typically do not see AD patients as being financially incapable until they have entered into the moderate stage of the disease.

A SHORT SENSE OF COMPETENCE QUESTIONNAIRE (SSCQ): MEASURING THE CAREGIVERS' SENSE OF COMPETENCE IN CARING FOR A DEMENTIA PATIENT

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Caregiving for dementia patients is stressful for family members. Physicians are often unaware of family caregivers' problems. The purpose of this study is to develop a short, valid and reliable diagnostic instrument, appropriate for general practice, geriatric outpatient clinics and community nurse's care, measuring caregivers' sense of being capable of caring for dementia patients. The method used is shortening the valid and reliable 27 item Sense of Competence Questionnaire (SCQ), based on Zarit's burden scale and Bengtson and Kuypers Family Crisis model. The Short Sense od Competence Questionnaire (SSCQ) was compiled by (a) selecting the most relevant items of the domains of original SCQ: satisfaction with the patient; satisfaction with caregiver role and personal life consequences of caring. (b) Psychometric testing. The subjects are 141 caregivers of non-institutionalized dementia patients. Reliability was also tested in three other studies of caregivers of dementia patients (n=90), daughters caring for disabled elderly parents (n=293) and partners of non-institutionalized stroke patients (n=166). The SSCQ contained 7 items, representing all SCQ domains. Its validity was satisfactory. Cronbach's alpha was 0.76 in the original study and ranged from 0.68-0.87 in the three other studies. The original SCQ was connected with the family support model, the SSCQ can still be connected with these management strategies of caregiver's problems. The SSCQ is a concise, valid and reliable instrument which can be connected with a strategy for responding to caregivers' problems.

PREDICTORS OF DURATION OF THE CAREGIVER ROLE.

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Caregivers for family members who have dementia have an arduous role that often includes deciding to institutionalize the loved one. The purpose of this study was to identify factors that influence the time until placement after critical supports are withdrawn. The termination of the Medicare Alzheimer's Disease Demonstration (MADD) in Minnesota offered a unique opportunity to address this question. Former treatment group participants constituted a large sample of persons with dementia, most of who had family caregivers. All had had intensive case management and a common set of community services, and all were eligible for Medicare reimbursement for community-based supportive services during the demonstration.

Caregivers of clients who were discharged from the demonstration when it ended were interviewed 24 months after discharge to determine former clients' living arrangements at the time of the surveys. The investigators used Cox's regression procedures to develop a proportional hazards model using this information and data obtained at the time the clients enrolled in the demonstration and compared it with the model for clients who were discharged while the demonstration was still underway. For cases discharged during the demonstration, higher levels of caregiver burden increased the patient's risk of early placement and better caregiver health decreased the risk. For cases that were still in the community when the demonstration ended, having a spousal caregiver increased the risk of placement, but neither caregiver burden nor health had a substantial effect.

THE PROCESS OF PLACEMENT: CAREGIVER PERSPECTIVES.

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Placement of an older adult charge into long term care presents a myriad of issues for family caregivers. Previous research has examined stress in older adults being admitted to a nursing home and the role relinquishment that caregivers experience after placement. An indepth exploration of family responses throughout the placement process has not been conducted. This paper compares the findings of two qualitative studies of families at different points in the admission process to identify salient issues and needs. The first study examined issues faced as caregivers (n=10) made the decision to place their elderly loved one upon discharge from an acute care stay. In the second study, families (n=7) were interviewed within six weeks post-placement. Themes related to these two phases of the placement process were then identified and contrasted. During active decision making, key issues for family members surrounded affirming the correctness of their decision, made with minimal information and amidst pressures to expedite the transfer. After the placement occurred, families struggled to accept their decision and to adjust to role changes. A perceived sense of isolation persisted throughout the experience. Findings suggest that the stress experienced in relationship to placement is an ongoing process rather than a discrete event. For families, the need to initiate coping occurs immediately before the placement decisions is made and persists well into the post-admission period. Implications for interventions are discussed.

Formal Aging Service Use and Caregivers' experiences: a racial-ethnic comparison.

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Many researchers have studied the relationship between formal aging service use and caregivers' experiences. However, most researchers failed to consider a possible reciprocal relationship between the two variables, and ignorance of endogeneity between them could result in biased estimates about the relationship.

Using data from the 1997 National Caregiver Survey, we examined the reciprocal relationship between formal aging service use and caregivers' experiences from different racial and ethnic backgrounds. In the study (N=620), 41 percent of the caregivers were Anglo, 19 percent were African American, 23 percent were Asian, and 17 percent were Hispanic. A large proportion of caregivers provided ADL (61%) and IADL (98%) assistance to impaired elderly. On average, caregivers spent 22.4 hours on caregiving per week, and more than 80 percent of them had caregiving experiences lasting over a year.

A majority of caregivers (71%) in the study reported a negative caregiving experience. African American and Hispanic caregivers showed higher levels of negative

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caregiving experiences than Anglo and Asian caregivers (F=2.77, p=.04). In addition, 28 percent of the caregivers used formal services. Compared to other racial-ethnic groups, Asians used the least amount of formal services (F=3.79, p=.01).

Results from two-stage least square analysis suggested that across groups, formal service use was not related to negative caregiving experiences. African-American, Hispanic, and Asian caregivers who reported higher levels of negative experiences were likely to use more formal services (t=2.06–3.4, p=.001–.04), but this relationship did not hold among Anglo caregivers (t=1.8, p=.07). Findings of this study may shed light on caregiving experiences of caregivers from different racial and ethnic groups and inform formal aging service development and delivery.

PREDICTORS OF PLANNING FOR FUTURE CARE NEEDS BY GERMAN AND U.S. SENIORS

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Older persons are often faced with concerns about future care needs. One might expect, on the one hand, that seniors who are more vulnerable (e.g., have more ADL-limitations, are older, have a smaller social network) would be more likely to plan because they have greater need. On the other hand, having more resources (such as a large network with more options for obtaining help) might enable more planning. Little is known about what motivates seniors to prepare for future care.

Predictors of preparation for future care needs were investigated by sending questionnaires to community dwelling seniors from both urban and rural settings in the USA (N=256) and Germany (N=188). In both samples seniors who were older and had more ADL-limitations were more likely to have made short-term and long-term plans for their future care needs ($p<.05$, for all analyses). Seniors with smaller social networks (i.e., fewer adult children) were less likely to make concrete plans. Being married was associated with more long-term planning, but only for the German sample. Also, income and education showed weak (but significant) associations with planning. Triggers for planning in the two national samples are discussed.

ARE THERE PHYSICAL HEALTH CONSEQUENCES OF OVERLOAD AMONG FAMILY CAREGIVERS AND DOES MASTERY MATTER?

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A model depicting cross-lag relationships between caregiver overload and physician visits/calls was proposed to analyze the effects of overload across time. In addition, the proposed model evaluated the role of mastery to better understand the interrelationships. Data on family caregivers (n=116) came from a longitudinal study of a population-based sample of disabled elders and their primary caregivers and were collected in 1993. LISREL was used to analyze the two-wave model (five-month causal lag). As hypothesized, a higher sense of overload (T_1) predicted higher number of physician visits (log transformation) at T_2 (.20) even when controlling for prior levels of physician visits and other important factors. Both higher number of physician visits at T_1 (-.20) and a higher sense of overload at T_1 (-.26) were significantly related to lower levels of mastery at T_2. However at T_2, higher levels of mastery were associated with lower levels of overload (-.16) and fewer physician visits (-.15). Findings are consistent with interventions emphasizing the importance of reducing a sense of overload and enhancing mastery in an effort to offset the physical health consequences of caregiving.

This study was supported by the NIA (AG07182).

RECIPROCAL EFFECTS BETWEEN COPING STRATEGIES AND BURNOUT AMONG CAREGIVERS FOR THE IMPAIRED ELDERLY IN JAPAN

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This study examines reciprocal effects between coping strategies and burnout among caregivers for the impaired elderly in Japan. One-year follow-up survey in 1997 was successfully completed for 547 caregivers living in an urban community. Coping strategies consisted of five factors: "keeping their own pace," "positive acceptance of caregiving role," "diverting themselves," "informal support seeking," and "formal support seeking." Burnout was composed of two sub-scales: "emotional exhaustion" and "depersonalization." Each reciprocal effect between the five coping strategies and the two sub-scales of burnout was estimated on a synchronous effect model respectively, after controlling confounding factors. Results obtained were as follows: 1) A reciprocal negative effect was found between diverting themselves and emotional exhaustion. 2) It was found that emotional exhaustion had a one-way negative effect on three coping strategies such as keeping their own pace, positive acceptance of caregiving role, and diverting themselves. It was also found that depersonalization had a one-way negative effect on positive acceptance of caregiving role. 3) None of the five coping strategies produced one-way effects on burnout.

CHANGES IN LABOR SUPPLY OF ADULT FEMALES WHO DO AND DO NOT CO-RESIDE WITH AN ELDER

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While the elderly population in the U.S. grows at an increasing rate, female labor supply continues to rise. On the one hand, wives and daughters provide most of the informal care to elders, possibly curtailing the labor supply of these women. On the other hand, elders, specifically grandparents, often provide child care, possibly increasing the labor supply of these same women. Does the addition of an elderly parent to a household increase or decrease the labor supply of adult daughters? This research compares changes in the labor supply of adult females who co-reside with an elder to those of eligible (female) co-residers over time.

Eleven years of data from the Panel Study of Income Dynamics, 1982-92, provide demographic and economic information on daughters, elders, and their households. Multinomial regression is used to examine the probability of an increase, decrease, or no change in their labor supply over time. Results indicate the average length of co-residence was 3 years; 74% of the adult females were working prior to co-residence, and 70% did not change their labor supply during the first year of co-residence. There is also evidence that while daughters contribute to elder care, elders also contribute to the household.

This research provides a more accurate account of the relationship between co-residence and employment over time, and lends insight into intergenerational transfers such as child care. The costs and benefits of co-residence on female labor supply, and vice-versa, need to be addressed further by employers and health care policy makers.

Family Caregivers: Reducing the Impact of Dementia-Related Behavior Problems. J. Tomatore, K. Hepburn, S. Ostwald. Dept. of Family Practice, U. of Minnesota, Minneapolis, MN 55414; U. of Texas Health Science Center, Houston, TX 77030.

Day-to-day behavioral problems are an important source of the adverse impacts of dementia caregiving -- and of patient institutionalization. This paper presents results from an NINR-sponsored randomized trial of the Minnesota Family Workshop, a psychoeducational program for caregivers of community-living dementia patients. An important component of this 7-week, 14-hour program was training aimed at changing caregivers' perceptions of the caregiving role, understanding patients' be-haviors, and mastering techniques for understanding and managing these behaviors. Instruction and practice aided caregivers to develop a detatched and analytic perspective on management of patient behavior. Approaches based on the Allen cognitive functional levels encourage caregivers to manage situations through structuring and communication techniques based on an understanding of the person's losses and remaining abilities. Regression analyses show that workshop participation and decreased levels of enmeshment and monitoring on the Phillips Beliefs about Caregiving scale significantly relate to lower levels of caregivers reporting being troubled by patients' memory problems ($F=3.61$, $p<.05$) and patient depression ($F=3.87$, $p<.01$) on the Teri RMBPC. These results suggest this clinical orientation to training may buffer serious causes of institutionalization and negative caregiver outcomes.

FAMILIES IN NEED?: FACTORS ASSOCIATED WITH FAMILY INVOLVEMENT IN GERIATRIC REHABILITATION.

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Although interest in programs which address the needs of families of the elderly continues to grow, very few have attempted to involve families in rehabilitation programs. Previous research on interventions with family members of elders has shown that not all families participate in the services offered. The purpose of this investigation was to examine the extent of utilization and characteristics of families and elders who were more likely to participate in family-based rehabilitation services.

The data were drawn from an action/demonstration project, funded by the AARP Andrus Foundation, evaluating a family-based model of vision rehabilitation services. Elders with vision impairment and a primary family member were interviewed at baseline and after receiving vision rehabilitation services at The Lighthouse. About 60% of the elders and family members interviewed participated in family services. Elders whose families were more likely to be involved in their rehabilitation program tended to: 1)have a larger social support network, 2)have more ADL disability, 3)receive more ADL help from informal helpers, 4)report better adaptation to vision loss, and 5)perceive their families as more overprotective. Families who participated in family service were more likely to: 1)have more frequent contact with the elder, 2)provide more ADL assistance, 3)feel more loss because of their relative's vision problems, and 4)report themselves as more overprotective of their relative than did those families that did not participate in the family services. In general, families that are more integrated and already involved in the support of their relative, are more likely to be able to participate, whereas families that are more tenuous in nature may be more difficult to attract.

FAMILY MANAGEMENT STYLES IN CAREGIVERS AND CARE RECEIVERS

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Management of the care of chronically ill elders in the community is becoming increasingly important as the number of older people increases. In this qualitative, grounded theory, study, 60 care dyads (32 Caucasian, 28 African-American) in two Midwestern areas were interviewed regarding how they manage giving and receiving care in their homes. One way to analyze data is to apply family management themes from another sample to this sample of care dyads. Knafl et al (1996), from their qualitative study of families with chronically ill children, found five themes that described how these families manage (thriving, accommodating, enduring, struggling, and floundering). Data from the present study are grouped to determine similarities and differences between these two types of family care. Implications from these management styles can aid in the development of interventions to enhance the coping ability of the family.

DIMENSIONS OF CAREGIVING FOR FAMILY MEMBERS WITH ALZHEIMER'S DISEASE

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The purpose was to identify dimensions of caregiving from the perspective of family caregivers. We interviewed 227 caregivers at baseline, 6, and 12 months asking "what is caregiving like for you". Responses were analyzed by computer-assisted content analysis (MCCA). The caregivers generated common themes that were consistent across time. Salient dimensions of caregiving were: a) the need for knowledge of Alzheimer's disease and care approaches, b) specific patient activities/behaviors and their timing, c) problems of caregiving/ related strategies, d) changes and resulting responses of the patient and/or caregiver, e) uncertainty about decisions and the future, and f) caregiver interaction with the patient and social/professional resources. The model expands former caregiving models by identifying issues that are consistently problematic for caregivers and suggests continued directions for intervention research.

NEGOTIATING THE DAY-TO-DAY: MOTHER/DAUGHTER CAREGIVING DYADS, CO-RESIDENCE AND WELL-BEING

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Nearly 20% of women over the age of 65 currently live with an adult child (usually a daughter) and more and more families are chosing to care for aging parents at home. In a society which values autonomy and independent living, practitioners are finding it important to identify factors that contribute to a "successful" arrangement in order to best serve their clients. This study used qualitative and quantitative approaches to explore how elderly mothers and their adult daughters negotiate the day-to-day practice of living together and the ways in which living together influences the well-being of both dyad members. We conducted in-depth interviews with twenty mother/daughter dyads, first together and then separately, and participants completed a short questionnaire of well-being and relationship measures. Preliminary findings indicate discrepancy in mothers' and daughters' experiences of living together. For example, daughters articulated significantly more stress and dissatisfaction, whereas mothers represented the experience in more benign and positive terms. Also, findings suggest that reframing roles and relationship parameters, and renegoatiating living space predicted quality of the living arrangement and overall well-being. Implications for care-management and ways to support both the elderly mother and the adult daughter caregiver in this living arrangement are discussed.

DEVELOPMENT OF INTRACORP'S ELDER CARE WORK-LIFE BALANCE RISK ASSESSMENT INDEX (BRAI) (sm)

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The BRAI multiple item assessment methodology was developed for Intracorp to provide a means of obtaining pre-test (T1) and post-test (T2) measures of the relative work/life health of employees with family elder care responsibilities. This present state multi-dimensional assessment tool gauges: 1) severity of the case profile; 2) employee stress; 3) employee productivity; and 4) adequacy of employer support. The BRAI has multiple applications including systematic assessment of the impact of elder care resource and referral program interventions and degree of organizational efficacy in addressing employees' dependent caregiving needs. Individual and grouped employee statistics can be derived for single or multiple BRAI dimensions.

Field and statistical testing insured the BRAI satisfied a battery of validity and reliability requirements. The BRAI incorporates a standardized scoring formula (0-100) and offers clinical baseline cutting scores. The value of assessment protocols like the Intracorp BRAI in appraising the challenge of elder care for the employed and judging employee benefits efficaciousness will be underscored.

STRESS AND WEIGHT CHANGE IN CAREGIVERS AND CONTROLS OVER A 6-MONTH PERIOD

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Research has shown that caregiving is stressful and that stressed persons are more likely to gain or lose weight. However, studies comparing weight change in caregivers to non-caregivers have inconsistent results. This study associations between stress, caregiving activities, and self-reported weight change of 10+ pounds at baseline and 6-months among caregivers to 200 elderly patients discharged from a rehabilitation hospital, 24 patients discharged from an acute care hospital, and 85 relatives to elderly patients attending an ambulatory clinic (controls). Caregivers and controls were mainly female (73%), lived with the patient (84%) and had similar Perceived Stress Scale (PSS) scores (mean =18, 17, and 17.6). Caregivers were younger (mean age=61, 53 vs. 67 years), had more caregiving-related stress (mean Burden Interview (BI)=17, 16, vs. 12), and helped the patient with more ADLs (mean=2,3,vs.0.9). Contrary to expectations, more controls than caregivers reported weight change at baseline (33 vs 18%). Among all groups, weight change was associated with higher PSS and BI scores, needing time away from caregiving, but not with caregiving activities. 28% of caregivers and 24% of controls had changed weight over the 6 month followup. Higher PSS scores at baseline and followup were associated with weight change at followup in both groups. Weight change incidence was about 23% in both groups, but was not associated with any baseline factors. Thus, similar factors were associated with weight change in caregivers and controls. Caregivers did not have more weight change than controls; this might have been due to high levels of general stress or demographic characteristics of controls.

THE IMPACT OF ESRD AND MEDICARE COVERAGE ON FAMILY LABOR FORCE PARTICIPATION.

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End-Stage Renal Disease (ESRD) patients are unique as they can qualify for Medicare coverage before the age of 65. The effect of this coverage on the hours of work decision of the spouse of the ESRD patient is tested using the **ESRD: Transplantation, Dialysis, and Quality of Life in Michigan, 1984-1988** survey. The survey directly questions the motivation behind changes in the hours of labor supplied by the spouse. Of the 648 married couples in the survey, 5.9% of spouses of patients with ESRD state that they decreased their work hours and 5.2% state that they increased their work hours due to the spouse's illness. The probability of an individual increasing or decreasing hours of work in response to the illness of the spouse will be examined using a probit procedure. The explanatory variables include information on length and duration of illness, type and frequencies of treatment, Medicare and other health insurance status, family income, other forms of financial support, potential care givers, comorbid conditions, and physical limitations, as well as various demographic and human capital characteristics. This paper will contribute to the debate on the rationale of ESRD patients under the age of 65 receiving Medicare coverage. It also examines the impact of decreased attachment to the labor force due to spousal care giving. This is important because as a spouse changes his or her labor force behavior, they are not only affecting their current income security but their income security in old age as time out of the labor force would be expected to have a negative effect on both their private and public pension benefits.

MEDICATION USE IN CAREGIVERS COMPARED TO NON-CAREGIVERS: REASONS WHY CAREGIVERS USE PSYCHOTROPIC MEDICATIONS

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Caregiving often results in adverse physical and psychological outcomes for both patients and caregivers. Physicians frequently prescribe medications to help alleviate these outcomes. These data compare the prevalence and incidence of medication use between 224 caregivers to elderly post-hospitalized (PH) patients and 85 potential caregivers to elderly patients (control) from an ambulatory clinic at baseline and 6 months follow-up. At baseline almost all patients (92%-98%) were taking some medication (mean 2.1-2.8) while hospitalized patients were significantly more likely to be taking psychotropics (29% vs. 11%, p=0.006). The prevalence of drug use in caregivers ranged from 66%-80% and use of psychotropic drugs among caregivers ranged from 7%-17%. Caregivers of PH patients were more likely to use psychotropics if patients they cared for used psychotropics. Furthermore, caregivers who are stressed [based on Perceived Stress Scale (PSS) and Burden Interview (BI)] and provide more help with IADL's are more likely to use psychotropics. Caregivers who performed caregiving activities more than 5 hours a day (21%) were more likely to use psychotropics when compared to those performing less than 2 hours per day (11%). Demographic factors [other than race (whites are more likely to use psychotropics)], caregiving activities, living arrangements, disruptive patient behaviors, and need for respite were not associated with use of drugs or psychotropics. No association was found between alcohol use and use of psychotropics. 177 follow-up interviews were conducted (127 caregivers, 50 controls). 10% use psychotropic drugs at follow-up while 78% use other drugs. The incidence of psychotropic medication use was 6.3% while 5.7% were no longer using psychotropics. Caregivers who were lost to follow-up were older, living with the patient, and caregivers to patients with no disruptive behaviors. Controlling for other variables: age, PSS score and weight change were factors associated with use of any drug at baseline. Regression analyses revealed that caregivers who use psychotropics are more likely to have higher PSS scores, be white, less educated, and care for patients who use psychotropics. By identifying risk factors for use of medications among patients and caregivers, providers can appropriately monitor indications for use of drugs and suggest alternative treatments.

FUTURE PLANNING BY OLDER MOTHERS OF ADULTS WITH CHRONIC MENTAL ILLNESS

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Despite growing interest in older caregiving parents of offspring with lifelong disabilities, minimal attention has been paid to parents of adults with mental illness. We collected mail surveys from 156 mothers ($\bar{X}$age = 67 yrs.; range = 50 - 88) in 41 states on planning for the future of their offspring with a severe mental disorder. Offspring ($\bar{X}$age = 38 yrs.; range = 19-58) were mostly males (76%) and diagnosed with schizophrenia (60%), bipolar disorder (16%), or multiple problems (24%). Very few mothers (11%) reported definite plans for their offspring's future residence, and many (47%) expended little or no effort toward this end. Most (76%) hoped that another family member would assume future care, yet only 17% saw this as likely. Financial plans were made by 66% of the mothers, while 28% had identified a legal guardian. Although 60% needed services to help with future planning, use of such aid was low.

"I'M JUST DUMPING A LOT MORE RESPONSIBILITY ON HER." THE SOCIAL CONSTRUCTION OF HEART FAILURE: GENDERED PERCEPTIONS OF PATIENTS AND CAREGIVERS.

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Heart failure is a condition that is increasingly more common within the United States. Heart failure affects 3 million to 4.7 million people each year. In addition, heart failure is the most common cause of death and hospitalization in older adults. It is estimated by epidemiological research that the number of patients affected by heart failure doubles with each decade of life. We know little about the psychosocial conditions of patients and their spouses. The purpose of this investigation was to determine whether there is a difference based on gender in the perception of heart failure and the construction of its meaning. These results were based on the interviews of more than 30 patients and their spouses/caregivers. A grounded theory method was used because this technique is inductive and lends itself well to the discovery and elaboration of themes, processes, and theories. It was hypothesized that differences in the construction of the meaning of being a heart failure patient would vary based on a person's age, stage of the disease, gender, and relationship to the disease, that is the role of patient or caregiver. A recognizable theme related to gender was that females were more aware of the feelings and emotions related to the disease, while males were more perceptive of bodily functions and changes in daily regiment, including life style changes, related to the disease. In addition, some of the difference in the perceptions of heart failure patients could be attributed to the different role each gender occupied.

SPOUSAL CAREGIVERS: EMERGENT DILEMMAS IN COPING WITH DEMENTIA

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With few exceptions, caregiving research that employs a transactional process model typically relies on quantitative, structured questionnaires and/or interviews to record caregivers' experiences in caregiving. In contrast, perspectival rhetorical analysis (with foundations in the humanistic theories of semiotics and rhetoric) utilizes naturalistic occurring discourse, allowing the worldview of the participant to emerge. As part of a larger project that included structured questionnaires, caregivers to a spouse with dementia participated in extended open-ended interviews (45 minutes to 1 hour). The interview consisted of four open-ended questions, which encouraged caregivers to share their recurring worldviews in their role of caregiver. Analysis of audio-recorded, verbatim transcripts of caregivers' discourse revealed three dilemmatic areas in their lives: (a) the transformation of their lives from previous life-roles to caregivers; (b) the tension between societal expectations of appropriate public self- and spousal behavior; and (c) day-to-day decisions and adjustments to spousal language and behavioral changes.

(This research was supported by a grant from the Fraternal Order of Eagles.)

PREDICTORS OF POSITIVE OUTCOMES FOR DUAL-EARNER COUPLES IN THE SANDWICHED GENERATION.

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Work-family research to date has examined the effects of managing paid work and care for children or managing care for elders while working. Few studies have focused on persons who are employed and who hold multiple types of caregiving roles, and none have examined multiple caregiving and work roles within the context of the dual-earner couple.

This paper reports on results from the first wave of a national survey of 320 couples who both work (one full time, the other at least half time), have children aged 18 or under in the household, and spend at least 3 hours per week caring for a parent. Potential participants were identified through nationwide telephone screening; those eligible then were mailed a survey concerning their work and family characteristics and responsibilities, work and family accommodations implemented, and various outcomes. Findings presented include the relationship between work and family conditions (characteristics, stressors, involvement, resources), types of work and family accommodations made, and life satisfaction, family satisfaction, and job satisfaction. Implications for the design of workplace, community, and self-help programs to help meet the needs of these "sandwiched generation" couples then are discussed.

THE FUNCTION OF HUMOR IN THE FAMILY CAREGIVER-CARE RECIPIENT RELATIONSHIP

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Twenty-three family caregivers were interviewed using a semi-structured interview format to explore the experiences of family caregivers who are responsible for managing medication administration for frail elders living at home, and who also attend adult day services on a regular basis. Content analysis of the data utilized the Arousal-Relief Theory of Humor to explain the frequent use of humorous anecdotes found throughout the interviews. For example, caregivers of individuals experiencing dementia often shared stories of behavioral problems that complicated medication administration schedules with smiles, jokes, and "punch lines" in their narratives. Adult children frequently related situations of role reversal with aged parents using humor to describe a parent's forgetfulness, incontinence, or inability to dress without assistance. It appears that humor is a useful communication tool for family caregivers that releases nervous energy about the interview process and the recall of stressful caregiving events, and should not be confused with disrespect or disregard for the dignity of the care recipient.

Project Supported by a Grant From the Nursing Research Program, Clinical Applications Research, Glaxo Wellcome Inc.

Title: Grandparents caring for children with intellectual disabilities: Preliminary findings. **Authors:** Matthew Janicki, Ph.D. Lucinda Grant-Griffin, Ph.D. Philip McCallion, Ph.D., & Stacey Kolomer, MSW. Address: University at Albany, Albany, NY 12222.

There have been growing reports in the United States of older women and men caring for their grandchildren and great grandchildren. Many of the grandparents are reported to be caring for children with intellectual disabilities.

Objectives: To systematically examine the needs of grandparents caring for children with intellectual disabilities.

Methods: telephone interviews are being conducted with grandparents identified through the Grandparent Resource Center in New York city. The protocol gathers data on grandparent demographics, extent of contact with the grandchild's parent, reasons for assuming care, strains and burdens resulting from caregiving, psychosocial well-being, personal health and functional status, extent of caregiving in addition to grandchildren, degree of reliance on informal supports, and need for, use of and satisfaction with formal services.

Results: Preliminary findings from the survey will be reported as well as findings from focus groups and key informant interviews on the unique needs of caregiving grandparents.

Conclusions: Conclusions will be drawn on needs for policy changes, service redesign and strategies to promote formal and informal supports.

FUNCTIONAL ASSISTANCE IN HISPANIC ELDERS

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Differences in functional disability by ethnicity among Hispanic elders has been documented and to some degree explained. Concern here is with differences in types of help provided to functionally dependent Hispanic elderly, based on family systems and other factors. This paper reports findings using the National Survey of Hispanic Elderly Persons. Multivariate analysis was used to predict numbers of ADL activities with which Hispanic elders were reported to receive help, to receive help from relatives or others residing in the same household, and to receive help from paid helpers. Because the large proportions of respondents receiving no help with ADLs produced skewed distributions, logistic regression was used (PROC LOGIST in SAS). 1854 respondents answered help-with-ADL items. Weighted multivariate logistic analysis controlling for need (total ADL dependence) showed no overall differences in receipt of help, but Cubans were less likely to receive paid help and more likely to receive help from those residing in the household than were Puerto Ricans. Control for age, gender, education, marital status, living situation, and home ownership did not change these findings. Being older and living with family predicted greater likelihood of help with ADLS; home ownership predicted lower likelihood. Being married and living with family predicted lower likelihood of paid help and greater likelihood of help from household residents. Rather than explaining the differences by ethnicity, even after controlling for varied factors, Cubans significantly different from Puerto Ricans in how they received help. Thus, differences persist among Hispanic groups despite control for personal and social support factors that also predict receipt of assistance. Understanding differences by ethnic group is important to the consideration of the needs of Hispanic elderly who are disabled.

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The Caregivers' Journey

Five (30 minute ea.)/color videotape/1997
Producer Dr. Geila Bar-David

This five-part video series features 19 diverse caregivers speaking about many common experiences in becoming a caregiver.

The series explores the following themes: ***The Toll***: **Acknowledges the tough costs of being a caregiver, including *Anger, Guilt, Loneliness, Frustration, Financial Difficulties and Burnout.* Includes helpful accounts of those caregivers who are several years beyond the loss of their loved-one. Their perspective and humor is a much needed remedy for those who are struggling with the caregiver role.** ***Surviving:*** **Each of the featured caregivers shares a remarkable piece of advice on how they cope or coped with the emotional, mental and physical costs discussed in *The Toll.* Viewers are encouraged to reflect on what helps them cope and to chose one piece of advice from the caregivers they've just seen.** ***Healing***: **Caregivers reflect on their sense of loss and on the healing process. Viewers are bolstered by the experience and advice of older caregivers whose perspective and growth may provide some hope for those in despair.** ***Quiet Triumphs***: **deals exclusively with the good that can come out of the caregiving journey. A moving testament to the human spirit, *Quiet Triumphs* shows how caregivers stretch their capacity for patience and caring, discover the importance of living in the moment, and even go on to lead more caring, fulfilling lives.**

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

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Implications of Population-based Genetics Studies for Understanding Racial Differences in Aging

Organizer: T. Miles, Chair Task Force on Minority Issues in Gerontology.

Participants:

T. Miles (University of Texas at San Antonio Health Sciences Center, San Antonio, TX 78284-7795) Overview of age-related change, genetic risk and race/ethnicity.

E. Wang (Jewish General Hospital, Montreal, Canada H4V 1K6) Heritability and individual differences in aging.

D. Evans (Rush Presbyterian St. Luke's Medical Center, Chicago, IL) Population-based studies of racial differences in dementia.

Office of Genetics and Disease Prevention/CDC. Public health importance of genetic and aging studies among racial and ethnic groups.

Discussant:

R. Kington (National Center for Health Statistics, Centers for Disease Control, Hyattsville, MD 20783) Bridging the gap between social science research and genetic epidemiology studies of aging.

A number of studies have provided evidence for genetic susceptibility to diseases of aging such as Alzheimer's dementia, osteoporosis, diabetes, and coronary heart disease. For these and other disorders of aging, considerable heterogeneity exists among racial and ethnic groups for environmental exposures, ge at onset, clinical course, and response to therapy. We have assembled a panel to discuss the findings that have emerged from the joint assessment of genetic and environmental influences of aging. The panel will discuss the implications of these findings for understanding individual and group differences in aging and aging-related disease.

Sponsored by the GSA Task Force on Minority Issues in Gerontology.

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BIOLOGICAL AND CLINICAL ISSUES IN STUDIES OF AGING AND HEALTH PROMOTION IN WOMEN. S.S. Sherman. National Institute on Aging. Bethesda. MD 20892-9205.

Participants:

M.Carnes (University of Wisconsin. Madison. WI 53705) Women's Health: Yesterday. Today. and Tomorrow.
J.E. Rudick (Office of Research on Women's Health. Bethesda. MD 20892)
L.P. Fried (Johns Hopkins Medical Institutions. Baltimore. MD 21205)
T. Miles (University of Texas at San Antonio Health Sciences Center. San Antonio. TX 78284-7795)
S.S. Sherman (NIA. Bethesda. MD 20892-9205)

Women's health research came of age and became a medical. social and political priority in 1991. The dynamic new emphasis resulted from the need to address concerns by congress and women's health advocates that women were being routinely excluded from clinical studies and that inadequate attention and resources had been devoted to women's health issues. NIH has since committed extensive resources to defining a comprehensive women's health research agenda and funding research to redress the gender disparity in the scientific and medical knowledge base.

Compared to men. development and aging in women are accompanied by a very different constellation of biological and psychosocial experiences that may impact on their later health. aging and predisposition to specific age-related pathologies. Some highly relevant biologic experiencesor factors unique to women include: premenopausal cycling of reproductive hormone levels: pregnancy. parturition and lactation: oral contraceptive use. gynecologic morbidity and related treatment outcomes. as well as age and type of menopause. and history of postmenopausal estrogen use. These experiences may have short-and long-term effects on a variety of other physiologic systems and may influence aging. age-related pathophysiology. as well as responses to therapeutic strategies.

There is little consensus on the significance of menopause in healthy aging or on its role in the etiology of chronic diseases/disorder of old age such as cardiovascular disease (CVD). osteoporosis an Alzheimer's Disease. Not surprisingly. considerable controversy exists over the scope of the physiological changes surrounding the menopause or presenting later in life that are attributable to reduced ovarian function per se. Menopause is a universal phenomenon. However. the manifestations of menopause are not. Cross-cultural research demonstrates considerable physiological sequelae. Future success in preventing and managing diseases and disorders which impact on women particularly during mid-life and old age (such as CVD. osteoporosis and potentially Alzheimer's disease) will require a substantially improved knowledge base to differentiate the contribution of "hormone deficiency" per se from that of aging. Such distinctions are critical in identifying those women whose conditions are largely the result of ovarian hormone insufficiency and who will benefit from hormone therapy (HRT). from those women whose disorders are due to risk/benefit equation. Such advances can do much to clarify ambiguities in the presentation of age-related disease. improve diagnosis and treatment. and ultimately reduce health care cost.

The session will attempt to focus on biological and clinical issues of high relevance in conducting and evaluating research on aging in women. Such a focus should be valuable in ultimately generating new research opportunities for epidemiologic and intervention studies which incorporate women's unique psychological experiences as well as their concerns and values.

This session is sponsored by the GSA Task Force on Women.

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DIETARY RESTRICTION, SIGNAL TRANSDUCTION, AND THE GENETICS OF AGING AND LONGEVITY: CONVERGENCE OF PARADIGMS

S.M. Jazwinski, Louisiana State University Medical Center, 1901 Perdido St., New Orleans, LA 70112; G.S. Roth, Gerontology Research Center, National Institute on Aging, 4940 Eastern Ave., Baltimore, MD 21224.

Participants:

S.M. Jazwinski (Louisiana State University Medical Center, New Orleans) Coordination of Metabolic Activity and Response to Stress in Yeast Longevity.

S. Hekimi (McGill University, Montreal, Canada H3A 1B1) Control of Metabolism, Physiological Rates, and Aging by the *C. elegans* Gene *clk-1*.

G. Ruvkun (Massachusetts General Hospital, Boston, MA 02114) Insulin Signaling in *C. elegans* Longevity.

T.E. Johnson (University of Colorado, Boulder, CO 80309) Gerontogene Mutants in *C. elegans* May Share Common Pathways with Dietary Restriction.

R. McCarter (University of Texas Health Science Center, San Antonio, TX 78284) Metabolic Aspects of Dietary Restriction.

M. Lane (Gerontology Research Center, Baltimore, MD 21224) Potential Metabolic Targets to Mimic Effects of Caloric Restriction.

N. Holbrook (Gerontology Research Center, Baltimore, MD 21224) Stress Signaling, Gene Expression, and Aging in Mammalian Systems.

J. Nelson (University of Texas Health Science Center, San Antonio, TX 78284) Enhanced Stress Resistance as a Common Pathway for Extended Lifespan: Evidence from the Food Restriction Model.

A number of genes involved in signal transduction have recently been shown to play roles in aging and longevity. Although most of this work has been conducted in invertebrates, certain parallels with mammalian aging have been proposed especially as related to the life span-extending effects of dietary restriction. This convergence stems from the implication of metabolic effects and stress resistance in both the invertebrate and mammalian models.

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Non-Linear Approaches to Aging Research: Can Biologists Meet the Challenge?

Chair: Gerald McClearn, Pennsylvania State University

Gerald McClearn, Pennsylvania State University, "Quantitative Genetics and Complex Systems"

F. Eugene Yates, University of California, Los Angeles, "Overview of Systems Theory and Its Potential as a Tool for Understanding Aging"

S. Michal Jazwinski, Louisiana State University Medical Center, "Loss of Organization: A Basic Feature of the Nonlinear Aging Process"

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Steven M. Boker, University of Texas Health Science Center, "Age-Based Comparisons of Nonlinear Dependency in Postural Control"

Both theoretical perspectives and the empirical data base on aging reveal that aging is a complex process or set of processes, with many "causal" inputs and with manifold consequences. It is increasingly recognized that traditional linear models are limited in their application to complex developmental phenomena such as the aging processes. Dramatic recent developments in the "sciences of complexity" have provided models for the analysis of non-linear dynamics in complex systems. Yet biologists often are not trained in these fields. This symposium is designed to explore the potential application of some of these models to phenomena of aging and encourage a dialogue between students and teachers, empiricists and theoreticians on this emerging area of potential importance to mapping the aging process.

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DEMENTIA GUIDELINES: PROLIFERATION, AMBIGUITY AND COSTS OF IMPLEMENTATION

C. Beck, Univ. of Arkansas for Medical Sciences, 4301 W. Markham, Slot 529, Little Rock, AR 72205.

Participants:

M. Cody (Univ. of AR. for Medical Sciences) Purpose and Scope of Dementia Guidelines.

E. Souder (Univ. of AR. for Medical Sciences) Comparison of Diagnostic Criteria for Dementia.

C. Beck (Univ. of AR. for Medical Sciences) Use of Multidisciplinary Teams in Assessing Dementia.

M. Zhang (University of AR. for Medical Sciences) The Cost of Implementing Assessment Guidelines.

Discussant:

G. Small (Univ. of California at Los Angeles, 90024)

Practice guidelines and consensus statements have been developed in an effort to create standardized diagnostic and assessment criteria, and recommend treatment strategies for dementia. We will review eight such reports that have been published concerning the diagnosis and treatment of dementia. The guidelines include the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) criteria, the American Academy of Neurology (AAN), the American Psychiatric Association (APA), the Agency for Health Care Policy and Research (AHCPR), and the Department of Veterans Affairs/University Healthsystem Consortium (VA/UHC) guidelines. The consensus statements include the Canadian, Swedish, and American Conferences. This paper reviews the purpose and scope of the eight guidelines and consensus statements. The review of the eight documents focuses on the concordance and discordance in diagnostic approaches, the use of a multidisciplinary team in the diagnostic process, and a cost comparison of the assessment guidelines. Implications for practice and health policy will also be discussed. The NINCDS-ADRDA criteria serve as the reference against which more recent consensus statements and guidelines are compared.

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FRAILTY IN THE ELDERLY: NEW SUPPORT FOR A STANDARDIZED DEFINITION FROM MAJOR POPULATION-BASED STUDIES.

L.P. Fried, Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD 21205.

L.P. Fried, J. Walston, A.B. Newman (For the Cardiovascular Health Study, Seattle, WA 98101). Overview of the phenotype of frailty.

L.P. Fried, A.B. Newman, J. Walston, C. Tangen, C. Hirsch, J. Gottdiener, W. Kop, R. Tracy. (For the Cardiovascular Health Study, Seattle, WA 98101). Frailty phenotype predicts mortality in older adults: The Cardiovascular Health Study.

J. Walston, A.B. Newman, M. McBurnie, W. Kop, J. Gottdiener, C. Hirsch, R. Tracy, L.P. Fried. (For the Cardiovascular Health Study, Seattle, WA 98101). Physical correlates of frailty in the Cardiovascular Health Study.

A.B. Newman, J. Gottdiener, W. Kop, M. McBurnie, C. Hirsch, R. Tracy, J. Walston, L.P. Fried. (For the Cardiovascular Health Study, Seattle, WA 98101). Associations of cardiovascular disease and frailty.

K. Bandeen-Roche, J. Walston, B. Johnson, S.L. Zeger, L.P. Fried. (School of Hygiene and Public Health and the School of Medicine, Johns Hopkins University, Baltimore, MD 21205). Phenotype of frailty: Characterization in the Women's Health and Aging Studies.

Discussant:

L. Ferrucci (National Institute for Research and Care in Aging, Florence, Italy)

Frailty is an entity that most geriatricians recognize in older adults and agree is associated with high risk for adverse outcomes, but there is no standardized definition. This symposium proposes a standardized definition of frailty and will present hypotheses as to the characteristics of the phenotype of frailty and findings as to its outcomes and correlates, building from hypotheses as to the nature of the syndrome, consensus-building discussions of the phenotypic characteristics, and substantial review of the literature and evaluation of findings. This question was evaluated utilizing data from 3 population-based studies of older adults: the Cardiovascular Health Study and the Women's Health and Aging Studies. This provides information on frailty in both disabled and non-disabled cohorts of older adults who have been followed prospectively.

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Siderails in Nursing Homes: Helps or Hazards?

J.M. Dunbar & L.S.Libow The Jewish Home and Hospital/The Mt. Sinai School of Medicine, New York, NY 10025

Participants:

J Arzt (Health Care Financing Administration - Region III, Philadelphia, PA 19101) ***The Health Care Financing Administration and Siderails***

E. Capezuti, N. Strumpf, L. Evans, G. Maislin, Univ. of Pennsylvania Schools of Nursing & Medicine, Philadelphia, Pa. 19104. ***Siderail Use and Nighttime Falls among Nursing Home Residents.***

R.R. Neufeld, The Jewish Home and Hospital/The Mt. Sinai School of Medicine, New York, NY 10025 ***Resident and Staff Knowledge and Attitudes to Siderails.***

S.G.Burger (National Citizens' Coalition for Nursing Home Reform, Washington, DC 20036)
Working with Families and Residents
Discussant:
Mathy Mezey New York University, NY 10003

Five years after HCFA included siderails in the definition of physical restraints, many nursing home staff, residents and families seem confused about a) their efficacy, b) their safety, and c) alternative solutions. One reason for the confusion is that currently no empirical data exist to support efficacy of siderails in preventing bed-related falls and injuries. Advocates for no siderails cite hazards such as entrapment, asphyxial deaths, falls, injuries, agitation, and urinary/fecal incontinence. At the same time, many staff, residents and families report that siderails help residents feel safe in bed.

Arzt will report on HCFA's role in defining and regulating the use of siderails in the US. He will discuss how the guidelines have evolved and some of the resulting misconceptions. Capezuti and her colleagues will discuss their study which involved the nighttime (10pm-6am) siderail use, and fall rates in three large, nonprofit nursing homes. Neufeld will report on the relatively high level of agreement among both staff and residents regarding their knowledge levels and attitudes towards siderails. Finally, Burger will report on how many families perceive siderails and the need to work together so that nursing home residents get the best and safest care possible -- free of restraints and siderails.

The Health Care Financing Administration and Siderails J.Arzt (Health Care Financing Administration - Region III, Philadelphia, PA 19101)

In 1990, the federal guidelines for care of nursing home residents changed dramatically when OBRA went into effect. The new regulations focused on the treatment of residents as opposed to structures and procedures. OBRA's guidelines to physical restraints generally are a good example of how the new regulations focus on the impact on the individual rather than the restraints themselves.

This presentation will discuss HCFA's some of the current guidelines. For example, when siderails may be used to help residents attain or maintain their highest practicable functional status; the need for a critical evaluation and assessment at the bedside; how siderails functioning as restraints may cause the same adverse effects as other physical restraints; and finally how siderails can be a very significant accident hazard.

This presentation will also focus on how HCFA's interpretative guidelines have evolved since 1990 and some of the subsequent misconceptions. For example, 1) how siderails are effective and 2) how some facilities interpreted the guidelines as meaning all siderails were unallowable and removed them all at once. These actions were problematic for two reasons: 1) they totally failed to assess the impact of the siderails on the resident, and 2) serious injuries occurred that could have been prevented, causing great concern among providers, families and residents.

Siderail Use and Nighttime Falls among Nursing Home Residents . E. Capezuti, N. Strumpf, L. Evans, G. Maislin, University of Pennsylvania Schools of Nursing & Medicine, Philadelphia, PA19104.

To help address the absence of empirical data about the efficacy of siderails in nursing homes, we conducted a secondary analysis of data from a longitudinal, prospective study conducted in three large, nonprofit nursing homes. We collected data on nighttime (10pm-6am) siderail use, and fall rates on 463 subjects, all of whom survived a year. Residents were divided into two groups: a) use of one or no siderails, or b) use of two siderails.

Bilateral siderails were used for an average of 61.1% of the 463 residents, 8% of whom fell at night. Residents with bilateral siderails had significantly greater cognitive deficits (MMSE 11.4 vs. 20.04 , p=.0001), greater functional impairment (PGDRS 21.82 vs. 7.94 p=.0001), were more likely to be judged by staff as non-ambulatory (52.83% vs. 8.70%, p=.001) and more likely to demonstrate behavioral symptoms (PGDRS subscale 3.13 vs. 2.2, p=.012). Although those with bilateral siderails fell less than those with 0/1 siderails, it was not statistically significant (odds ratio: 0.71, 95% CI: 0.36, 1.41).

Use of bilateral siderails was not associated with significantly lower risk of falls or injuries. We should continue to focus efforts to develop individualized approaches to reduce risk nighttime falling among nursing home residents.

Attitudes of Staff and Residents to Siderails in Nursing Homes R.R. Neufeld, J.M. Dunbar The Jewish Home & Hospital/ Mt. Sinai School of Medicine, New York, NY 10025

Our study examined the relationship between bed-type and injuries and accidents sustained among nursing home staff and residents. There were 6 facilities, in 5 states, with 279 beds in each of the study and control groups. In addition to analyzing the injuries and accidents, we also administered surveys to the residents and staff regarding both their knowledge and attitudes to siderails.

The most notable finding of linear and logistic regressions of preliminary data of the staff surveys is that, with just a few exceptions, there were no significant differences among staff. Rehabilitation staff and all levels of nursing staff shared similar knowledge levels and attitudes to the use of siderails in nursing homes. Frequency distributions show that approximately two thirds of staff think 1) that siderails pose a risk to safety and 2) that they can cause injuries. Fifty six percent think that siderails assist in transfers.

Residents tended to be more positive about siderails than staff. To be included in the resident survey, residents had to score at least 24 on the MMSE. Sixty seven per cent of residents reported that they use siderails to help them get in an out of bed, 75% percent use siderails to turn over in bed, and they were evenly divided about whether siderails made them feel safe while in bed.

Working with Families and Residents S.G.Burger
(National Citizens' Coalition for Nursing Home Reform, Washington, DC 20036)

For the last few decades, professionals advocated siderails to ensure the safety of nursing home residents while in bed. They obviously did an excellent job as the vast majority of families and residents believed that siderails were helpful, desirable and necessary. Now, professionals and advocates must educate about the hazards of siderails AND help families, residents and staff unlearn old and dangerous information.

Families and residents need to understand why siderails are hazardous. They also need assurances about the safety of their family member. Many families expect that nursing homes, with their full-time staffs, will provide better care for than they could at home. The reality often belies the expectation and siderails, like physical restraints, are associated with injuries and poor quality care.

For their part, nursing homes need
1) to involve families in the process of:
a) assessment, and b) the development and implementation of individualized care plans, the basis of the restraint-free care; and 2) to make environmental changes.

The goal is for families and care givers to work together to complement each other so that nursing home residents get the best and safest care possible -- free of restraints and siderails.

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WET AND SAD: URINARY INCONTINENCE AND DEPRESSIVE SYMPTOMS IN OLDER ADULTS.

E Dugan, SJ Cohen, J Preisser & C Davis. Dept Of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157.

The involuntary loss of urine is a common and unpleasant problem for many older adults. The association between urinary incontinence (UI) and negative psychological outcomes is assumed, however the empirical evidence has been mixed. This study examined the relationship of UI and depressive symptoms (DS) in 668 community dwelling adults (age >60) who completed telephone surveys at baseline and endpoint as part of a randomized clinical trial. Wilcoxon Rank Sum Tests showed that UI status was correlated with DS (r=.11, p=.05). Proportional odds and logistic regression analyses were used to determine the relative importance of UI (status, frequency, amount), health (physical, mental), and demographic (age, gender, marital status) variables to DS. Analyses showed that UI status, life satisfaction, health and gender were significant predictors of DS. Further analyses found that among UI adults (N=230), mental health, life satisfaction and the perception that UI interfered with daily life were significant predictors of severe depressive symptoms. Interventions for older adults with depressive symptoms ought to include screening for problems with UI. Similarly, for incontinent adults, screening for and treatment of depressive symptoms is appropriate.

COMPARISON OF DIETARY INTAKE OF PERSONS WITH FECAL INCONTINENCE (FI) AND THAT OF AGE AND GENDER MATCHED CONTROLS.

D.Bliss, J. McLaughlin, H. Jung, A. Lowry, K. Savik, L. Jensen, Depts. of Nursing, Agronomy, Medicine, University of Minnesota and USDA, Minneapolis, St. Paul, MN 55455.

Persons with FI report avoiding foods, limiting intake or skipping meals to prevent FI. Little is known about the nutritional profile or deficiencies of persons with FI. The nutritional intake from 8-day diet records of 39 community-living persons with FI (8M, 31F; Grp FI) was compared with that of persons with normal bowel function matched for gender and age±8 yrs (Grp CON). Groups were similar in age and weight (Grp FI=62±2 yrs; 79±3 kg vs Grp CON=61±2 yrs, p=.8; 76±2 kg, p=.3). Diet analysis using Nutritionist IV™ showed no significant difference in intake of kcal, fat, fiber, lactose and caffeine between Grp FI and Grp CON (kcal/d= 1829±68 vs 2030±334, p=.6; fat=67±3 vs 62±5 g/d, p=.4; dietary fiber=15±1 vs 13±1 g/d, p=.09; lactose=8±1 vs 7±1 g/d, p=.6; caffeine=310±56 vs 238±44 mg/d, p=.3). Grp FI had a greater intake of carbohydrate (239±11 g/d), manganese (2.3±.1 mg/d) and vitamin B1 (1.6±.1 mg/d) compared to Grp Con (203±10 g/d, p=.02; 1.9±.1 mg/d, p=.02; 1.3±.1 mg/d, p=.02). Diets of both groups exceeded 100% of RDA for protein, iron, sodium, potassium and vitamins B2, B3, and C, had <50% of RDA for biotin, chromium and copper but did not differ in these nutrients (p>.05). The % RDA for calcium and vitamin D were 84%±6% and 56%±8% for Grp FI and 90%±8% (p=.6) and 69%±11% for Grp CON (p=.4). Despite reports of altered intake, diets of persons with FI were similar to those of controls: high in protein and sodium and low in fiber and some minerals.

EFFECTS OF ALENDRONATE TREATMENT IN OLDER OSTEOPOROTIC WOMEN.

E.V.Caplan, M.F. Bellantoni, P.Arnold, and J.R. Shapiro, Div. Of Geriatric Medicine, Johns Hopkins Univ. School of Medicine, Baltimore, MD 21224

Alendronate has been shown to increase bone mineral density and prevent fractures in postmenopausal women; however it is not known if women greater than 70 years receive benefit. In our experience 106 women with osteoporosis 70±11.6 years (mean±SD) completed at least one year of alendronate therapy (12.6±2.2months).71 of the women were 70 years or older (77.6±4.7). Below are the bone mineral density (BMD) data from the entire group and women over 70years.

Bone	Baseline T-Scores	% ChangeBMD/Year on Alendronate		Response rate > 0% change BMD/year	
		all ♀	♀ >70y	all ♀	♀ >70y
APLS	-2.4±1.4	3.2±6.1†	3.7±6.2†	80	77
LLS	-3.6±1.5	5.2±9.8†	5.6±11.1*	78	76
FN	-2.5±0.9	1.6±5.7*	1.6±4.2*	72	67
TH	-2.3±1.0	3.3±5.2†	3.3±5.1†	79	77

* P<.01, † P<.0001 (Paired t-test analysis of baseline & post treatment)

All women had osteoporosis at baseline. Statistically significant improvement in bone mineral density was achieved in the anteroposterior lumbar spine (APLS), lateral lumbar spine (LLS), femoral neck (FN) and total hip(TH) for the entire group as well those greater than 70 years. The older group did not differ in the response rate defined as greater than 0% change BMD/year. These data suggest that older osteoporotic women achieve comparable increases in bone density with alendronate to those of younger women and that the decision to treat should not be based on age.

Older Adults and Cataract Surgery: Who Decides to Have Surgery?

Cynthia Owsley, Beth Stalvey, Jennifer Wells, Michael Sloane. Center for Research in Applied Gerontology, & Departments of Ophthalmology and Psychology, University of Alabama at Birmingham, AL 35294.

Among older adults with cataract, what features distinguish between those who elect surgery and those who do not? 281 older adults were identified through eye clinics, who had clinically diagnosed cataract with acuity worse than 20/30. About equal numbers of those who elected surgery (N=144) and those who declined surgery (N=137) were recruited. All were made aware by their ophthalmologist that cataract surgery was an option as a treatment for their impaired vision; all had health insurance that would cover the surgery; 97% had bilateral cataract. The following variables were evaluated to determine if they were independently associated with electing surgery: acuity, contrast sensitivity, and disability glare for the better eye and worse eye; difficulty with visual activities of daily living (IADLs); driving difficulty; depression; cognitive impairment; general health. Logistic regression indicated that the following characteristics were independently associated with choosing surgery: more severe acuity impairment for the worse eye; more difficulty with visual IADLs; better cognitive status; and fewer depressive symptoms, as compared to those who decided against surgery. Results imply that the decision to have cataract surgery is motivated by the severity of visual impairment especially as it impacts IADLs. Those who are depressed and/or have cognitive impairment may decline surgery even though it would have a beneficial impact on their vision.

URINARY INCONTINENCE AND QUALITY OF LIFE IN COMMUNITY-DWELLING OLDER MEN: DEVELOPMENT AND TESTING OF A MEASURE

J.P. Robinson, Rutgers, The State University, College of Nursing, Newark, NJ 07102

Condition-specific measures of health-related quality of life (HRQOL) are important indicators of treatment efficacy in geriatric research and practice. The Urogenital Distress Inventory (UDI) and Incontinence Impact Questionnaire (IIQ) together provide a reliable, valid, and sensitive indication of the specific impact of urinary incontinence (UI) on HRQOL in older women. No such instruments exist for use with older men. The purpose of this study was to develop reliable and valid versions of the UDI and IIQ for use with older men. Content validity was assessed by 11 experts and a convenience sample of 34 community-dwelling older men with actual or potential UI. Reliability and validity were then assessed with a similar convenience sample of 102 subjects. Percent agreement scores of ≥.70 were achieved for all items after 3 rounds of content validity testing. Male versions of both instruments were internally consistent (UDI α=.87; IIQ α=.95). A modest correlation (r=.50) was observed between urinary symptoms (UDI) and functional impact (IIQ). UDI scores varied significantly and appropriately with desired socialization, urine leakage, depression, diabetes, and enlarged prostate. IIQ scores varied significantly and appropriately with urine leakage. Factor structures of both instruments were different than those observed for females. Gender-specific versions of these instruments are recommended for use in research and clinical practice to measure efficacy of treatment for UI.

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SENIORS' PREFERENCES FOR CHRONIC HEALTH STATES: UTILITY ASSESSMENTS OF HEART DISEASE, STROKE AND COGNITIVE IMPAIRMENT

G. Naglie, C. Tansey, H. Llewellyn-Thomas, M. Krahn, The Toronto Hospital and Sunnybrook Health Science Centre, University of Toronto, Toronto, Ontario, Canada.

Utility assessments are global measures of quality of life that are expressed as a value between 0 and 1, and are particularly valuable in making comparisons across health states and in economic evaluations. The objective of this study was to elicit utilities from seniors for several common chronic health states. We prepared written descriptions of the following states: mild and severe angina; severe heart failure (CHF); mild and severe stroke; and, mild and severe cognitive impairment (CI). The descriptions included disease-related symptoms and a profile of functional status. Each participant was presented with 4 health states in a random order. Utility values were elicited by the standard gamble method. We completed 116 interviews of community-living seniors aged 65-80, with a mean age of 71.7. Seventy percent were female, 33% did not graduate high school, 90% were retired, 26% had a history of heart problems, 8% had current angina, and 5% had experienced a stroke. The mean utility values (± 95% confidence interval) were: mild angina 0.92 (0.04); severe angina 0.88 (0.04); severe CHF 0.86 (0.06); mild stroke 0.95 (0.06); severe stroke 0.51 (0.08); mild CI 0.96 (0.04); and, severe CI 0.67 (0.08). The range of values was wide for individual states and there was considerable overlap of values across states. We conclude that seniors' relative preference for mild chronic health states was quite similar, but their relative preference for severe cardiac states (angina or CHF) was substantially higher than for severe neuro-cognitive states (CI or stroke).

PROVIDER'S ESTIMATE VS GAIT SPEED AS RISK PREDICTOR

S Studenski D Wallace J Guralnik J Chandler Kansas U Med Center KC Ks 66160, NIA, Bethesda Md Merck Research Laboratories Blue Bell Pa

Performance measures predict future function and health in epidemiologic studies but their predictive ability in clinical settings is unknown. An ongoing prospective study of function, health status and utilization includes baseline and every 3 month measures of ADL (NHIS scale), health (SF36), risk for hospitalization (Boult's probability of repeated admission-Pra), physical performance (gait

speed), and *monitoring of* health service use in older adults from VA and Medicare managed care. At entry, each subject's primary care physician (DOC) estimated one year risk for hospitalization (HOSP) and personal care dependency (ADL). One year data in 331 elders (mean age 74, 41% female, 22% black) showed 62 were HOSP and 64 had ADL dependency. DOC estimate alone contributed to prediction (chisq 10.2 for hosp, 34 for ADL). In logistic regression on HOSP, DOC estimate was no longer significant (p=.12), when adjusted for gait speed (p=.04) and Pra (p=.07) In logistic regression on ADL, DOC estimate remained significant (P=.002) but gait speed added substantial explained variance (p<.0001).

Physician estimates of future risk for hospitalization and functional dependence can be supplemented by gait speed and PRA risk data to improve accuracy.

USE OF A VALIDATED SCREENING SURVEY IN A MANAGED CARE POPULATION

C.L. Vojta, M. A. Forciea, P. Wallace, K. Coburn, R. Lavizzo-Mourey, Departments of Health and Disease Management and Geriatrics, University of Pennsylvania Health System, Philadelphia, PA 19104

The probability of repeat admission (Pra) questionnaire has been shown to accurately predict those elderly at high risk for future hospitalizations. Interventions aimed at this group have been successful at decreasing hospitalizations, length of stay, and, in some instances, mortality. As part of its broad Disease Management Program the University of Pennsylvania Health System (UPHS) is piloting a senior care module and administered the Pra as part of a larger questionnaire to a convenience sample of 693 elderly, enrolled in a managed care organization. These patients all were full risk capitated to UPHS and received their primary care from one of five suburban practices affiliated with the health system. Overall response rate was 79 percent with 9 percent of responses unable to be scored due to incomplete answers. Based on a Pra score of .35 or higher, 5 percent of patients were deemed at high risk for hospitalization in the near future. However, risk stratification based on the Pra missed many conditions often associated with increased risk of declining health status including: 94 percent of those with depression, 93 percent of those reporting falls, 85 percent of patients with involuntary weight change, and 97 percent of elderly who smoked. Most frequently reported medical problems were: hypertension (54 percent) arthritis (51 percent) urinary problems (23 percent) and heart disease (18 percent). Most frequent admissions for these full risk seniors were: coronary artery disease, congestive heart failure, pneumonia, chest pain and cerebral vascular accident. These results suggest that additional methods beyond the Pra are needed to detect conditions resulting in high risk for decline. Further, the Medicare managed care population has significant chronic diseases.

PARTNERS PASSCARD: A MODEL FOR SUCCESSFUL RESEARCH SUBJECT RECRUITMENT

M.K. Jedrziewski, J.A. Grisso, R. Lavizzo-Mourey, N. Smith, Institute on Aging, Division of Geriatric Medicine and Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania, 3615 Chestnut Street, Philadelphia, PA 19104-6006.

Recruitment and retention of older study subjects is an area of research often given little attention by investigators and frequently requires special considerations.[1,2,3] Consequently the elderly are frequently underrepresented in research studies and gaps in knowledge about the causes, diagnosis and treatment of health problems in the elderly remain. Three years ago, the University of Pennsylvania's Institute on Aging initiated an innovative program, Partners in Healthy Aging (PHA), to address this problem. The program combines research subject recruitment with health education and community service. By offering all three components within a single program, each component compliments the others and adds to the success of each. Based on initial success, PHA has been enhanced and expanded. With a new name, Penn Partners in Healthy Living PassCard, the program will include all of the old components, as well as new ones like a quarterly newsletter, discounts from local vendors and at University of Pennsylvania Health System (UPHS) hospitals, and information and referral. Membership is free. Anyone at least age 50 can join. As of March 1998, the Partners PassCard Program had over 3,500 members (approximately 2/3 women and roughly 1/3 African-American). Over 500 potentially eligible research subjects have been referred to a variety of studies (N=15), and approximately 1,850 members have attended health education events. With an expansion throughout the entire UPHS, including all core and affiliate hospitals, membership is expected to grow to 30,000 by July 1998 and to 150,000 by July 2000. Research recruitment will be enhanced by (1) having a larger membership base from which to recruit, (2) linkages to a special research database with medical history data for each member and (3) more incentives to increase involvement and satisfaction with the Partners PassCard Program.

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PATIENT PREFERENCE FOR RECOVERY OF ACTIVITIES FOLLOWING HIP FRACTURE.

R.A. Marottoli, P. Peduzzi, J. Concato, T. Fried, S. Bogardus, M.E. Tinetti. VA Connecticut, West Haven, CT, and Yale University School of Medicine, New Haven, CT 06504.

To determine the extent of recovery after hip fracture, we compared recovery at six months on a patient-generated list of activities they most wanted to be able to do again to standard scales of instrumental and basic activities of daily living (IADL/ADL). Participants included 304 nondemented individuals age 65 years and older who underwent surgical repair of a hip fracture at two New Haven, CT hospitals and returned home within 3 months. At the time of fracture, participants were asked to identify up to 5 activities they would most like to be able to do again as a result of their rehabilitation, as well as standard scales of IADL and ADL; these were reassessed at 6 months. IADL and ADL items accounted for 54% of preferences, while other higher level activities accounted for 46%. Recovery in preference items was modestly correlated with change in ADL (r=.45) and IADL (r=.54) scores. Direct assessment of patient preference offers an alternative or adjunct to standard activity scales as measures of functional recovery. Potential advantages include improved efficiency and focus of attention on what is important to the patient, but it does limit the ability to compare individuals directly or pool results across studies.

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EMOTION AND AGING: THEORY AND METHODOLOGY

D.M. Isaacowitz, Department of Psychology, University of Pennsylvania, 3815 Walnut St. Philadelphia, PA 19104-6196.

Participants:

L.L. Carstensen (Stanford University, Stanford, CA 94305) Emotional Functioning in Old Age

D.M. Isaacowitz (University of Pennsylvania, Philadelphia, PA 19104-6196) A Cognitive Styles Approach to Emotion and Aging

G. Labouvie-Vief (Wayne State University, Detroit, MI 48202) Aging and the Processing of Complex Affect: A Developmental Analysis

M.P. Lawton (Polisher Research Institute, Philadelphia Geriatric Center, Philadelphia, PA 19141-2996) Affect States in Setting and Event Contexts: Methods and New Findings

Discussant:

M. Gatz (University of Southern California, Los Angeles, CA 90089)

It is now well-established that emotions and emotional functioning remain important in late life. This symposium will highlight different theoretical and methodological approaches to research on the nature and experience of emotions in later life, and will illustrate that emotion research is critical to a complete understanding of the psychology of aging. Presenters will demonstrate the wide variety of ways that emotion and aging can be conceptualized and studied: from individual differences in emotional experience to age differences in emotion regulation and emotional understanding. Links will be made between emotions and time appraisal, social choices, cognitive development and optimism. Our discussant will consider how research on emotion and aging can facilitate a better understanding of mental health and mental illness among older adults.

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ETHNICITY AND CAREGIVING FOR DEMENTIA-IMPAIRED ELDERS

S. Levkoff, Division on Aging, Harvard Medical School, 643 Huntington Avenue, Boston, MA 02115

Participants:

S. Levkoff, B. Levy, P.F. Weitzman (Division on Aging, Harvard Medical School) Role of Ethnicity in the Help-seeking of Family Caregivers of Demented Elders.

W.L. Hinton & S. Levkoff (Department of Social Medicine, Harvard Medical School) Depressive Symptoms among African-American, Chinese-American, Latino, and European-American Caregivers.

Y.K. Chee, P.F. Weitzman, S. Levkoff (Division on Aging, Harvard Medical School) An Examination of Social Cognitive Features of Conflict Resolution in Minority Caregivers for Dementia-Impaired Elders.

R. Dunigan & S. Levkoff (Division on Aging, Harvard Medical School) Heterogeneity of Caregiving Experiences in the African-American Community.

H. Reynoso, N. Henderson, S. Levkoff (Division on Aging, Harvard Medical School) Dementia Radio Support Group for Caregivers in the Latino Community.

Discussants:

P. Dilworth-Anderson (Department of Child Development and Family Relations, University of North Carolina at Greensboro, 27412)

L. Davis (College of Nursing and Allied Health Professions, Chicago State University, Chicago, IL 60628)

Despite the fact that ethnic minority elders constitute a large and growing proportion of our elderly population, relatively little is known about how dementing illness is experienced and responded to by ethnic minority families. Given the enormous emotional and financial toll that dementia exerts, it is important to understand how ethnic minority caregivers experience and cope with this debilitating illness and to develop culturally competent interventions to reduce caregiver burden and enhance caregiver capabilities to cope.

This symposium presents results from an NIA/Office of Research on Minority Health funded Exploratory Center for Minority Aging and Health Promotion. The Harvard Center brought together gerontologists, medical anthropologists, clinicians, psychologists, and sociologists to conduct a set of complementary quantitative and qualitative research studies and interventions. The goal was to develop an understanding of how family based characteristics and culturally based illness meanings and behaviors interact with the ways that local health care providers and organizations perceive and respond to the needs of caregivers for dementia-impaired elders.

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HOW GREATER ATTENTION TO THE LIFE COURSE MIGHT REVOLUTIONIZE GERONTOLOGY.

Richard A. Settersten, Jr., Department of Sociology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-7124.

Participants:

Linda George (Department of Sociology, Duke University, Durham, NC 27708). What Life Course Perspectives Offer the Study of Aging and Health.

Gunhild Hagestad (Human Development and Social Policy, Northwestern University, Evanston, IL 60208). Interdependent Lives and Relationships in Changing Times: A Life Course View of Families and Aging.

Jon Hendricks & Stephen J. Cutler (University Honors College, Oregon State University, Corvalis, OR 97331-2221; Department of Sociology, University of Vermont, Burlington, VT 05405) Leisure in Life Span Perspective.

John Henretta (Department of Sociology, University of Florida, Gainesville, FL 32611-7330). The Implications of Life Course Principles for Retirement Research.

Richard A. Settersten, Jr. (Department of Sociology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-7124). Social Policy and the Structure of Human Lives.

Discussants:

Dale Dannefer (Warner Graduate School, University of Rochester, Rochester, NY 14627)

Christine Fry (Department of Sociology and Anthropology, Loyola University, Chicago, IL 60626)

If gerontologists were to seriously incorporate (and not just pay lip service to) life-course concepts, principles, and methods, how might this transform the field of gerontology? Participants will explore how greater attention to the life course carries the potential to change both the questions we ask and the theories we use to guide our questions; the kinds of data we collect, how we collect and analyze them, and how we interpret our results; and the implications of our research for policy and practice. In addition, participants will consider the barriers that prevent the field from moving in these directions and how we might overcome them. The symposium is organized around five substantive areas of scholarship in gerontology: health (George), family (Hagestad), leisure and social participation (Hendricks & Cutler), retirement (Henretta), and social policy (Settersten). The discussants (Dannefer and Fry) will highlight points of convergence and divergence across the papers, and reflect on the implications of these questions for the field of gerontology, both present and future.

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RESIDENT CHARACTERISTICS ASSOCIATED WITH WANDERING BEHAVIOR IN NURSING HOMES. D.K. Kiely, J.N. Morris. Hebrew Rehabilitation Center for Aged, Boston, MA 02131.

We performed three separate multivariate logistic regression analyses to investigate the association between resident characteristics and wandering behavior: 1) incidence (N=4014), 2) decline (N=3114), 3) improvement (N=493). Subjects were residents in Medicare and Medicaid-certified nursing homes in the state of Vermont between June of 1996 and March of 1997. The average time between baseline and follow-up assessments was three months. Results from the three analyses were very similar. Based on the incidence analysis, residents (baseline assessment) with pneumonia (OR=5.19, CI_{95}=1.87-14.40), a long term memory problem (OR=3.53, CI_{95}=1.92-6.48), who were easily distracted (OR=2.14, CI_{95}=1.41-3.26), or who experienced a recent fall (OR=3.23, CI_{95}=2.01-5.21), were likely to exhibit wandering behavior during follow-up. Residents (baseline assessment) with impaired locomotion (OR=0.70, CI_{95}=0.60-0.81), were less likely to wander during follow-up. Since infections have been reported to be associated with delirious symptoms, pneumonia may represent delirious symptoms which may be the underlying risk factor(s) for the association between pneumonia and the development of wandering behavior. Efforts to reduce or prevent long term memory problems and delirium may indirectly reduce wandering behavior. Little is known about the relationship between resident characteristics and wandering behavior. More research is needed to understand this relationship and to develop successful interventions.

A PROGRAM TO IMPROVE COMPLIANCE WITH ANTI-PSYCHOTIC DRUG PRESCRIBING PRACTICES IN NURSING HOMES. M.D. Llorente, E.J. Olsen, E. A. Crocco, M.A. Silverman, O. Leyva-Yapur. Departments of Psychiatry & Behavioral Sciences and Geriatric Medicine, University of Miami, Miami, FL, 33125 and Geriatric Research, Education & Clinical Center (GRECC), VAMC, Miami, FL, 33125.

Appropriate use of anti-psychotic drugs in nursing homes remains a source of concern. The purpose of this study was to provide an educational program to all providers of care in order to improve documented compliance with Federal guidelines regarding the use of anti-psychotic medications in the nursing home. The pharmacy records of 8 nursing homes in southeast Florida were reviewed at baseline, 6 months and 12 months for documented compliance with OBRA regulations regarding antipsychotic drugs and then randomized to one of three groups following the baseline assessment: (1) Control – no intervention (N=3); (2) Feedback provided to administrator of facility (N=3); (3) Educational "detailing" given to all providers, including physicians (N=2). Mean change from baseline was calculated and where appropriate, ANOVA was conducted, with statistical significance set at $p<0.05$. Overall compliance improved in the educational group significantly more than in the other two groups ($p<0.05$). The educational group showed positive changes in 6 of 7 guidelines with the most amenable to change being appropriate diagnosis, dosage reduction, side effects monitoring and behavioral interventions. This study confirms that academic "detailing" is an effective method of improving compliance with Federal regulations and more effective than feedback provided only to the administrator. The effects are apparent up to 12 months post-intervention suggesting that once yearly training is likely to be effective in improved compliance with OBRA antipsychotic drug regulations.

INDIVIDUALIZED VS. CLASSICAL MUSIC ON AGITATION IN ALZHEIMER'S DISEASE AND RELATED DISORDERS

L. Gerdner, University of Iowa College of Nursing, Iowa City, Iowa 52242

Elderly confusion and agitation is a crucial nursing problem. Limitations and concerns related to the current management of these behaviors suggest the need to investigate alternative nursing interventions. One such intervention is music. The purpose of this study was to test Gerdner's mid-range theory of individualized music intervention for agitation (IMAI). A quasi-experimental repeated measures pretest-posttest cross over design was used to compare the immediate and 30 minute residual effects of individualized music to classical "relaxation" music relative to baseline on the frequency of agitated behaviors in elderly persons with Alzheimer's disease and related disorders. Thirty-nine subjects were recruited from six long term care facilities in Iowa. Each subject was studied over a 17 week period. The selection of individualized music was based on findings from the Modified Hartsock Music Preference Questionnaire

(Family Version). Music interventions were presented "free field" for 30 minutes, two times per week. The time of intervention was individualized based on application of the Progressively Lowered Stress Threshold Model. The dependent variable was measured using the Modified Cohen-Mansfield Agitation Inventory. Determination of the effectiveness of the intervention was made through a repeated measures analysis of variance (ANOVA) on the frequency of agitation. Findings reveal that individualized music is effective in reducing the frequency of agitated behaviors in this sample.

ADJUSTING TO INSTITUTIONALIZATION: THE LONG-TERM IMPLICATIONS OF PREPLACEMENT STRESS.

J. E. Gaugler, S. A. Leitsch, K. S. Lyons, S. H. Zarit, Department of Human Development and Family Studies, Penn State University, University Park, PA 16802, A. Davey, Department of Child & Family Development, University of Georgia, Athens, GA 30602, & L. I. Pearlin, Department of Sociology, University of Maryland, College Park, MD 20742.

Institutionalizing a disabled elderly relative represents a significant transition in the caregiving process. However, little research has examined the long-term implications of the nursing home transition among caregivers who experience significant levels of preplacement stress. By using 4-wave longitudinal data from the Caregiver Stress and Coping Study, we determined whether various stressors and poor mental health had an impact on: 1) weekly visitation, 2) satisfaction with the nursing home environment, and 3) problems experienced with staff. In subsequent growth curve analyses, it was found that higher problematic behavior at preplacement was predictive of decreases in environmental satisfaction over a 2-year period. Likewise, preplacement problematic behavior and depression were positively related to increased problems with staff over a 2-year period. These findings suggest that stressful experiences prior to placement exert a long-term influence among caregivers who institutionalize their relatives.

INDIVIDUALIZED POSITIVE PSYCHOSOCIAL INTERVENTIONS: ARE THEY WORTH THE TROUBLE?

Katy Ruckdeschel, Kimberly Van Haitsma, & M. Powell Lawton, Philadelphia Geriatric Center, 5301 Old York Road, Philadelphia, PA 19141.

Day and evening shift CNAs from eight nursing home units (N = 90) were trained to deliver a 10-minute, one-to-one, psychosocial intervention to a demented resident, three times per week for approximately three weeks. Residents (N = 86) were included if they scored 24 or below on the MMSE and had a diagnosis of dementia of any type. On four of the units, CNAs were taught to deliver an intervention that was tailored to their assigned resident's preferences. On the other four units, CNAs were trained in an attention-control intervention which was invariant across residents and involved simply making conversation with a resident, facilitated as needed by looking through a magazine together. We observed these CNA-resident interactions on 522 occasions, and recorded information regarding the quantity and quality of CNAs' and residents' verbal and nonverbal behavior, and residents' emotion. We will describe the process of tailoring interventions to residents' preferences, and will present data that compare behavioral and affective outcomes for residents receiving individualized interventions versus those receiving the generic, attention-control intervention. Supported by Alzheimer's Association/ Tacrine Fund Pilot Research Grant #TRG-95-006

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AGE, COGNITION AND NEUROPATHOLOGY: FINDINGS FROM THE NUN STUDY.

K.P. Riley, D.A. Snowdon, W. R. Markesbery & N. Nanayakkara, Sanders-Brown Center on Aging, University of Kentucky, Lexington, KY 40536

Age-associated declines in memory and other cognitive abilities are well-documented among older adults, but the precise substrates of these changes are not yet clear. The medial temporal lobe of the brain (hippocampal formation) has been related to cognitive changes seen in normal aging. This study examined age, cognitive performance, and neuropathologic findings in participants in the Nun Study, a longitudinal study of aging and Alzheimer's disease. Participants included 59 women aged 77-92 who did not meet the neuropathologic criteria for Alzheimer's disease. Our primary variable of interest was neurofibrillary tangles in the hippocampus. As expected, age was negatively associated with cognitive performance on the each of the cognitive tests in the CERAD battery. The correlation coefficient between age and number of hippocampal tangles was 0.35 (p=0.006). The number of hippocampal tangles was negatively associated with cognitive performance: partial correlation values controlling for age ranged from -0.26 for Word Recall to -0.50 for Verbal Fluency. These findings suggest that neurofibrillary tangles in the hippocampus may provide a partial explanation for the relationship between age and performance on tests of memory and other areas of cognitive function.

VERBAL LEARNING AND MEMORY AND SUBSEQUENT ALL-CAUSE MORTALITY IN AN ELDERLY, COMMUNITY-DWELLING COHORT

G.E. Swan, D. Carmelli, M.R. McElroy, R. Krasnow, Center for Health Sciences, SRI International, 333 Ravenswood Ave., Menlo Park, CA 94025.

The relationship between verbal learning and memory and subsequent all-cause mortality in older adults was examined in 624 male participants in the Western Collaborative Group Study (WCGS; mean age at time of neuropsychological testing = 75.7 ± 3.8 yrs). At baseline, all participants received the California Verbal Learning Test (CVLT) as part of a comprehensive biomedical examination. Data from the CVLT were then factor analyzed to reduce within-scale redundancy. Four factors emerged and, in order of size, they were: verbal learning and memory, response discrimination, learning strategy, and recognition memory. After an average of 4.2 years of follow-up, 119 (19%) of participants were deceased. After the exclusion of individuals with stroke and dementia, Cox regression analyses revealed an unadjusted relative risk (RR) for all-cause mortality of 1.86, 95%CI = 1.53-2.27, associated with low (a difference of one SD) performance on the verbal learning and memory factor. The unadjusted RRs for mortality associated with low performance on the other CVLT factors were not significant. The RR for low verbal learning and memory remained significant after adjustment for age, education, depressive symptoms (CES-D), smoking, peripheral arterial disease, pulse pressure, and clinically-confirmed cancer and coronary heart disease at baseline, 1.65, 95% CI = 1.32-2.05. Among the above covariates, significant, independent associations with all-cause mortality were also observed for age, smoking, peripheral arterial disease, and cancer in the final multivariate model. Relative to the other risk factors, low verbal learning and memory made the largest contribution, 45%, to the all-cause mortality model, overall chi square = 70.20, $p < .001$. This is the first analysis to reveal an independent association between low verbal learning and memory and increased risk for all-cause mortality among elderly, community-dwelling men.

PREDICTORS OF PERFORMANCE ON TIMED INSTRUMENTAL ACTIVITIES OF DAILY LIVING

M. Sloane, E. Rickert, C. Owsley, University of Alabama at Birmingham, Birmingham, AL 35290.
R.D. Ellis, Wayne State University, Detroit, MI 48202.

A question of interest is what variables are related to an older adults' ability to accomplish tasks of daily living in a timely fashion. One hundred and sixty older adults (aged 65 and older) were administered a battery of tests as part of a multi-site clinical trial (ACTIVE). Predictor variables that were examined included visual acuity, reading ability, speed of cognitive processing, memory, and reasoning. The dependent variable (Timed IADL's) is a measure of the time required to complete several instrumental tasks of daily living such as reading medicine labels, ingredients on a can of food, making change, finding the object on a shelf among other items, and finding a name in the phone directory. Results indicated that slower Timed IADL performance was associated with slower visual processing ($r = .35$), and impairment in memory ($r = -.22$) and reasoning ($r = -.29$) even after partialling out the impact of age, reading ability, and visual acuity. Results of a regression analysis examining the variance accounted for in Timed IADL's by age, reading ability, and visual acuity revealed an R^2 of .45. A similar amount of variance was accounted for by the cognitive measures alone. A regression analysis was then performed including age, reading ability, and visual acuity in addition to speed of cognitive processing, memory, and reasoning. The R^2 for this analysis was .54, representing a significant increment in the model. In the final model, visual acuity, reading ability, reasoning, and speed of processing were all significant predictors of Timed IADL performance.

PREDICTING CONTROL IN OLDER ADULTS

Jason M. Kozlowski, Jason C. Allaire, & Michael Marsiske, Institute of Gerontology, 87 East Ferry Wayne State University, Detroit, Michigan 48202

The present study was to conducted to investigate if everyday cognition measures serve as better predictors of locus of control, beliefs and self-efficacy than traditional cognition measures. Traditional measures of intelligence have been found to account for a significant amount of the variance in elders' intellectual control beliefs. However, the most commonly used measure of intellectual self-efficacy, the PIC, actually measures control within an everyday or real world context. Consequently, "everyday" cognition maybe a better proximal predictor of control than traditional abstract, cognitive measures (Lachman, 1986). Participants for the analysis were 121 (male=25, female=96) community dwelling adults aged 60 to 92 (mean=73), and with an average of 13 years of education (S.D.=3.0). Participants were administered the Personality in Intellectual Aging Contexts Inventory (Lachman, 1986), multiple psychometric measures of intelligence, and a battery of newly created everyday cognitive measures. Two hierarchical regressions were conducted, regressing two composite scores from the PIC measure representing Intellectual Self-Efficacy and Concern about Intellectual Aging on to both everyday measures and traditional measures of intelligence. Results indicated that everyday measures accounted for 21% of the variance in Intellectual Self-Efficacy and 26% of the variance in Concern about Intellectual Aging, but did not account for all of the variance related to basic abilities. Results from a follow-up communality analysis indicated that both everyday and basic abilities shared 20% and 24% of the predictive variance in Intellectual Self-Efficacy and Concern about Intellectual Aging respectively. Furthermore, everyday abilities and basic abilities uniquely accounted for a significant amount of the variance in both PIC variables. Discussion will focus on the shared and unique components of these everyday and basic abilities.

AGE EXCUSES: CONVERSATIONAL MANAGEMENT OF MEMORY FAILURES IN OLDER ADULTS. Ellen Bouchard Ryan (Psychiatry and Gerontological Studies, McMaster University, Hamilton, ON, Canada L8S 4J9), Sherrie Bieman-Copland, Carolyn H. Ellis, and Ann P. Anas.

The Communication Predicament Model of Aging predicts that older adults come to behave in age-constrained ways through others' communication of negative age stereotypes about competence. Since stereotypes about poor memory are especially prevalent and even begin with middle age, we have been examining the impact of age excuses for everyday memory failures. Our earlier studies have shown that age excuses are frequent for episodes of forgetting and that both young and old respondents agree on their believability and politeness in conversation for older adults. This study is the first to examine the meaning of age excuses outside an old age context; no ages for adult targets were given. In a repeated-measures, counter-balanced design, young adults ($N = 63$; mean age 20.6 years) evaluated participants in conversational scenarios making one of four types of excuse across four everyday memory failures. In contrast to situation and effort excuses, age excuses were rated at least as positively as ability excuses on dimensions such as benevolence, courtesy, and believability. However, the speaker's estimated age increased by 12 years for the age excuse condition in comparison to all other excuse conditions. Only in the age excuse condition, were estimated ages negatively correlated with perceived competence. Finally, as predicted from causal attribution theory, age excuses led to the same increase in likelihood for future forgetting as ability excuses. Thus, this study provides evidence for the Communication Predicament in that adults using an age excuse [a comfortable and benevolent choice within a conversation] are perceived to be substantially older and less competent as rememberers than those using other excuses. In particular, the age excuse puts the speaker in an even more unfavorable light than one who blames his or her own lack of ability.

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BEHAVIORAL SYMPTOMS OF DEMENTIA AND THE CULTURE OF NURSING HOMES

L. Walker, J. Robison, Braceland Center for Mental Health and Aging, Institute of Living/Hartford Hospital, 400 Washington Street, Hartford, CT 06106.

Participants:

J. Robison, L.Walker, E. Doherty (Braceland Center for Mental Health and Aging) Nursing Home Capacity to Implement Individualized Care Plans.

L. Walker, C.Gruman, M. Porter (Braceland Center and UCONN Center on Aging) Evolution of Individualized Care Practices in Connecticut Nursing Homes.

J. Rader (Benedictine Institute for Long Term Care and Oregon Health Sciences University, Mt. Angel, OR 97362) Changing the Culture of Caring: An Imperative for Reducing Behavioral Symptoms.

C. Unsino (372 Central Park West, NY, NY 10025) Growth and Development for Residents with Dementia and the Staff Who Care for them.

Discussants:

Carter Catlett Williams, CSW (Social Work Consultant in Aging, 287 Dartmouth Street, Rochester, NY 14607)

Sarah Burger (Acting Director, National Citizen's Coalition for Nursing Home Reform, 1424 16th Street NW, Suite 202, Washington, DC 20036)

Persons suffering from dementia often express behavioral symptoms which challenge caregivers to accurately interpret, and appropriately respond to this form of communication. This series of papers describes practices and perceptions of care providers in nursing homes as they seek to create change in their environments. Specific innovative models of caring, as well as new ways of thinking about nursing home environments are described. Discussants will address the need for pioneering change in nursing homes to improve caregivers' understanding of and responses to behavioral symptoms of dementia.

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EVALUATING QUALITY AND CLIENT OUTCOMES IN CONSUMER DIRECTED HOME CARE

S. R. Kunkel, Scripps Gerontology Center, Miami University, Oxford, OH 45056 and P. Nadash, National Institute on Consumer Directed Long-Term Services, Washington, DC, 20024

Participants:

L. Polivka and J. R. Salmon (Florida Policy Exchange Center, University of South Florida, Tampa, FL) Quality of life: Consumer views

P. Nadash (National Institute on Consumer Directed Long-Term Services, Washington, DC) Beyond consumer satisfaction: Empowering consumers to assess quality of services

S.R. Kunkel, M.A. Scala, and P.S. Mayberry (Scripps Gerontology Center, Miami University) Peaceful coexistence?: Integrating consumer-oriented measures into existing data systems

Discussant:

R.A. Applebaum (Scripps Gerontology Center, Miami University, Oxford, OH 45056)

Monitoring quality and evaluating program impacts are essential for program planning and development for all long-term service delivery systems. Consumer direction introduces new challenges into these processes. Giving priority to the voices of consumers raises issues about the appropriateness of standardized measures of quality and satisfaction with services. Questions of how quality is defined, and by whom, become even more critical in consumer-directed home services. This symposium will review some of these challenges, drawing on the experiences of several projects funded by the Robert Wood Johnson Independent Choices initiative. Specifically, we will deal with consumer definitions of quality of life, the differences between consumer satisfaction and consumer assessment of quality, and the possibilities for integrating consumer-based measures of quality and outcomes into existing information systems.

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SYMPOSIUM: Medicare, HMOs, and Prescription Drugs: Implications of Drug Benefit Management for Patients, Physicians, and Health Plans. Chair—David J. Gross, Ph.D., Public Policy Institute, AARP, 601 E St., NW, Washington, DC, 20049

PRESENTATIONS:

- "Prescription Drug Formularies in Managed Care: The Perspective of Older Consumers," David J. Gross, Ph.D., American Association of Retired Persons, Washington, D.C.
- "PBM Drug Formulary Recommendations: An Analysis of Commonly Prescribed Drugs for the Elderly," Kevin Schulman, MD, Georgetown University Medical Center, Washington, DC
- "Pharmaceutical Benefit Management Strategies Among Medicare HMOs: Characterization and Potential Impact," Helene Levens Lipton, Ph.D., University of California, San Francisco, San Francisco, CA

DISCUSSANT: Stephen B. Soumerai, Sc.D., Harvard Medical School and Harvard Pilgrim Health Care, Boston, MA

Increasingly, Medicare beneficiaries are joining HMOs in order to access prescription drug benefits that are not covered under traditional Medicare. As with other components of health care, HMOs may apply a number utilization management techniques to improve the effectiveness of drug prescribing. They might also contract with Pharmacy Benefits Managers (PBMs) to perform such services for them. There is little understanding of: (1) whether drug benefit management approaches compromise the quality of drug therapy provided to patients, and (2) whether restricting such approaches erode the ability of drug benefit managers to provide a cost-effective prescription drug benefit.

This symposium presents new research and literature syntheses to guide the policy debate and to set the stage for future research in the area. The three papers assess the impact of drug benefit management from the perspective of the consumer, the physician, or the managed care organization. The first paper identifies both benefits and risks to consumers of prescription drug formularies and synthesizes the existing evidence on what customers (HMOs, employer groups, and third party payers) are seeking in drug formulary design; the potential conflicts between clinical standards and economic relationships between PBMs and drug manufacturers; and the impact of formulary development on quality of pharmaceutical care received. The second paper presents findings from a review of PBM formulary recommendations for drugs commonly used by the elderly, and discusses the implications of differences in formulary recommendations on physicians' ability to make appropriate prescribing decisions. The third paper examines how HMOs manage drug benefits for Medicare beneficiaries; what drug payment mechanisms, cost controls and utilization management strategies they apply; how these strategies are changing over time; and their potential implications for quality of care. SRPP(10)

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Personhood, Meaning, and the Spirit: A New Look at Ethics and Alzheimer's Disease

M. Holstein (Park Ridge Center for the Study of Health, Faith, and Ethics, 211 East Ontario Street, Suite 800, Chicago, IL 60611) Organizer. The Well-being of People with Dementia: Moral Worlds and the Quality of Life.

K. Lyman (Chaffey College, Claremont, CA 91711). Living with Alzheimer's Disease: The Creation of Meaning Among Persons with Dementia.

D. McCurdy (Park Ridge Center for the Study of Health, Faith, and Ethics, Chicago, IL 60611). Personhood, Spirituality, and Hope in the Case of Human Beings with Dementia.

S. Post (Case Western Reserve University, Cleveland, OH 44106). The Fear of Forgetfulness: A Grassroots Approach to Alzheimer's Disease Ethics.

S. Sabat (Georgetown University, Washington, D.C. 20057). Voice of Alzheimer's Disease Sufferers: A Call Treatment Based on Personhood.

The ideas represented in this symposium will encourage us to "see" the person with dementia differently and to enlarge the terrain that comes under the purview of ethics. Preliminarily charted by philosophers, gerontologists, moral psychologists and others, this terrain is not primarily about dilemmas, moments of choice, or decision making. It is about social relations and everyday life. It is not about abstract notions of personhood but about embodied personhood expressed within a context and through relationships. It is not about "loss of self" but about the way current images of dementia help construct that very loss and shape—often negatively—interactions with patients. And finally, it is not about accommodating to current policy or institutional arrangements but about rendering visible the ideologies that support those often harmful arrangements with the intent of modifying them. The symposium's primary lens will focus on the people with dementia and the often unarticulated assumptions about notions like reciprocity, responsibility, accountability, or dignity that shape how we behave with one another and that derive from our deepest beliefs about what is right and good. It assumes that despite neuropathological changes life can be made better, that people with AD are renegotiating their moral worlds, and that images and metaphors affect action and behaviors for ill or for good.

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A LONGITUDINAL STUDY OF SERVICE USE BY AFRICAN AMERICAN AND WHITE CAREGIVERS: PREDICTORS AND OUTCOMES, C.B. Cox, Graduate School of Social Service, Fordham University, 113 W. 60th St., New York, New York 10023.

Data collected through a 3 year longitudinal study of service use by 300 African-American and white caregivers compared the factors determining service utilization as well the effects of these services. Although income levels and relationships varied between the groups, racial differences in the caregiving experience were minimal. Both groups sought assistance in comparable stages of the illness with both reporting similar levels of burden and stress. Both sets of caregivers intended to use programs but few followed through on these plans, although their own status and that of the relative declined over the 3 year period. Patient and caregiver needs, the most important determinants of service use, made varying contributions to the use of I & R programs and support groups. However, in both instances, service users, even with the deteriorating status of their relatives, reported lower levels of stress and burden than non-users. The findings underscore the overpowering commonality of the caregiving experience, the impact that services can have on well-being, and the necessity for assuring that caregivers are effectively linked with community programs. Funded by the Alzheimers Association/Helena Ponti Hartwell Investigator-Initiated Research Grant.

ATTITUDES AND PREFERENCES OF NATIVE AMERICAN ELDERS AND THEIR ADULT CHILDREN REGARDING LONG-TERM CARE OPTIONS

Sherry Gerbi, Elizabeth Chapleski Institute of Gerontology, Wayne State University, Detroit, MI

Given that social policy for long-term care (LTC) must take into account a changing ethnic composition and that Native Americans are among the fastest growing population of older minority, it's important to understand their attitudes and preferences. The American Indian Long-Term Care Study interviewed Michigan Native Americans about informal social networks, preferences and attitudes toward long-term care, and utilization of health and long-term care services. This study matched 55 adult children (34-60 yr.) with elders (56-87 yr.) from the larger study. Respondents answered a series of closed and open-ended questions about LTC, defined as "when you [meaning the elder] can no longer take care of yourself without help." They were asked if their family had discussed LTC options, the circumstances that precipitated such a discussion, how comfortable they were talking about LTC issues, and the importance and extent of the discussion. When given a list of LTC housing options, more than 2/3 of both the elders and adult children wanted the parent to stay in their own home with family or paid help. If that option was not feasible, adult children expected the elder to move in with them or a sibling. In contrast, elders preferred moving to assisted senior housing or a nursing home, seemingly to maintain independence. Socio-demographic variables, such as self-rated health status, education, income, family size, and area of residence, were examined in order to identify characteristics that might explain differences in attitudes and preferences.

THE RELATION OF EMPLOYMENT TO DEPRESSION AND SELF-SUFFICIENCY AMONG KOREAN-AMERICAN ELDERS

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The Senior Community Service Employment Program (SCSEP) is federally funded through the Older Americans Act. The program subsidizes elder employment and encourages unsubsidized placement of its older workers. While a few studies examine the program's effectiveness, none address the special needs and outcomes for Korean-American (KA) elders. KA enrollees (N=70) in Los Angeles and New York City constitute a judgement sample (N=70) and form a bulk of KA enrollees in SCSEP. A comparison group (N=70) of KA elder non-enrollees was recruited in the same locations and matched by age, gender and years in the U.S. KA elders who work in the SCSEP experience decreased risk of depression and significantly less dependence on Supplemental Security Income (SSI). Enrollees showed a mean CES-D score of 10.6 versus a comparison group mean of 17.8, where 16 is the cut-point for risk of depression. Similarly, enrollees showed much less use of SSI (19%) than among the comparison group (63%). Multivariate analysis confirmed these findings. Policy implications will be discussed.

THE EFFECT OF AN INTERGENERATIONAL PROGRAM ON THE ATTITUDES OF EMOTIONALLY DISTURBED YOUTH TOWARD THE ELDERLY.

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The life stages of adolescence and old age share many similarities as well as differences. Through intergenerational contact, studies show that youth and older people can enjoy many mutual benefits. Little research is available on the effect such programs have on the attitudes of emotionally disturbed youth. This paper examines the effect of an intergenerational program on the attitudes of emotionally disturbed youth toward the elderly. The program involved 36 older individuals from 3 sites in the community and nine adolescent boys from a residential treatment center for troubled youth. The program included a classroom curriculum and corresponding visits with older people at the community sites. The students' attitudes about older people were measured at the onset and at the conclusion of the intergenerational program. The scores of these tests, combined with a quantitative and qualitative evaluation of the program were used to assess the value of the intergenerational experience as well as its impact on the attitudes of the participating youth. The results from the descriptive statistics indicate that the youths' attitudes about older people were less positive after the intergenerational experience. However, their evaluations of the program were extremely positive. These results suggest that overall, the youth involved in the program had very positive attitudes about the experience and about the older people they interacted with during the intergenerational experience. Limitations of the study and implications for practice and future research are discussed.

EFFECTS OF DIVERSITY ON HEALTH CARE USE

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Ethnicity and culture always affect a relationship, regardless of that relationship. For people of color, culture has long been accepted as significant in the understanding of health and illness. This study examines individual, group, and organizational characteristics that affect the probability of health care utilization by people of color. The analysis assesses the importance of predisposing, enabling, and need factors in determining health care service utilization by minority elderly. Particular attention is directed to the effect of race, and gender similarity with health care provider on health care utilization. The study represents a secondary analysis of data collected by the 1994 Minority Health Care Survey conducted for the Commonwealth Fund by Harris and Associates. The sample utilized consisted of 1,538 adults, 45 years of age and older, including 592 Whites, 292 African-Americans, 301 Hispanics, and 131 Asian/Pacific Islanders. Using a multivariate analysis technique that involved ordinary least squares regression, the study examined the relative contributions of each independent variables in explaining the variance in utilization. Dyads in which patient and physician had different gender but same race exerted a positive effect on utilization of services. It would appear that similarity in race and not in gender will increase utilization of health care services, which could bring implications in the implementation of public policy toward any particular population, in this case, the minority elderly.

DETERMINANTS OF NURSING HOME PLACEMENT AMONG SOUTH ASIAN ELDERLY.

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Research targeting the elderly among ethnic minorities in the United States has primarily focused on long-term care of the African Americans and the Hispanics. However, little is known about the determinants of nursing home placement among South Asian families.

The purpose of this paper is to examine the determinants of nursing home placement among South Asian elderly in the Dallas/Fort Worth area. A sample of 150 South Asian caregivers of the elderly were interviewed and a logistic regression model was tested with factors predicting the likelihood of nursing home placement of the elderly. Significant variables in the model were education of the caregiver, level of caregiver burden, health problems of the elder, elders english proficiency, and elders education. The findings indicate that the elderly who are more assimilated are more likely to be placed in a nursing home. It is also found that socio-economic status of the caregiver is likely to increase the likelihood of nursing home placement. Policy makers and human service providers must be more attentive to the level of acculturation in South Asian families and tailor policies and programs accordingly.

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AT HOME IN THE COMMUNITY: HOME-SHARING OPTIONS FOR ELDERS

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Despite the increasing variety of living options for older adults, the majority of seniors prefer to age in place in their own homes as long as possible. One option which seeks to support this desire is home-sharing. The current study examined an agency-assisted home share program (serving people 55 and older, disabled, and single parents in a 5 county area in the upper Midwest) to identify 1) reasons for participating in home sharing; 2) outcomes of participating; 3) factors related to successful home sharing; and 4) satisfaction with the program. Data included agency records from a sample of home share matches ending over the past 5 years (N=103); agency records on all currently on-going matches (N=100); and interviews with a small sample of current program participants (N=28). Overall, respondents reported satisfaction with the program, with home-owners citing assistance (n=31, 33.3%); rental income (n=26, 28.0%); and security (n=11, 11.8%) as primary reasons for home-sharing. Live-ins' primary reason was affordable housing (n=78, 83.0%). Benefits ranged from delaying nursing home admission to avoiding homelessness. Variables related to initial matchability and subsequent longevity included home accommodations, service assistance, participant demographics and lifestyles. Implications for programs and seniors are addressed.

THE UNEQUAL LOCATIONAL CONCENTRATIONS OF RENT-SUBSIDIZED HOUSING OCCUPIED BY FLORIDA'S ELDERLY

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This paper investigates the extent that government-subsidized low-rent housing accommodations occupied by poor elderly tenants are unequally located throughout the 67 counties of Florida. The basis for making a judgement of inequality are the county locations of the population of elderly poor (below 150% of the U.S. poverty threshold) who are not living in subsidized rental housing and the county locations of the nonpoor elderly population. Three categories of rent-assisted housing are examined: conventional Public Housing, Section 8 Certificates and Vouchers, and HUD's (Department of Housing and Urban Development), Multifamily Privately Owned Subsidized Properties. The Dissimilarity Index and the Gini Coefficient are computed to measure locational inequality. Data are drawn from HUD's "Picture of Subsidized Housing," database containing the universe of rent-subsidized projects found in every state. Findings revealed that the county locations of poor elderly residents in the conventional Public Housing Program diverged the most from both the county locations of the unsubsidized elderly poor and the elderly nonpoor, especially the latter. Implications of the unequal locational availability of affordable housing are discussed. (Research was funded by a grant to The CASERA PROJECT from the Retirement Research Foundation of Chicago.)

AN INVESTIGATION OF FACTORS THAT CONTRIBUTE TO ELDERLY HOUSING ABANDONMENT IN PHILA., PA

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Almost half of the houses in Phila. are owned by people 55+, with one-third owned by elders 65+, and a number of these are abandoned. The purpose of the study was to investigate the factors that contribute to elderly housing abandonment. Key objectives included the creation of an algorithm to predict abandonment and identification of interventions to assist low and moderate income elderly in protecting their homes by estate planning. A variety of data sources were used in the study, including the collection of large secondary data sets. A neighborhood based, Geographic Information System was created to integrate and display this data. The study also gathered information from 175 older adults via a senior center survey questioning current living arrangements and plans that seniors made about their estate. Initial findings indicate that nearly one-third of older adults surveyed have not done any type of planning to pass along their house to loved ones, specifically in low and middle income sections of the City;and that several hundred houses per year are abandoned by elderly homeowners in various parts of the City.

THE NEW WORLD OF ASSISTED LIVING: CAN "MOM AND POP" FACILITIES SURVIVE?

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Assisted living facilities (ALFs) offer a less restrictive residential environment for dependent adults who do not require skilled nursing care. ALFs vary in size from small, family-like homes to larger, more institutional-style facilities. Using qualitative methodology, this research provides an in-depth view of the day-to-day challenges faced by providers in 22 small (2-15 bed) ALFs located in 3 suburban counties in Georgia. Critical gerontology and exchange theory provide the theoretical frameworks for this analysis. Providing a family-like environment for residents and keeping rates affordable were important concerns of all providers. Unfortunately, many providers (especially owner-operators) had on-going difficulties even staying in business. Costs associated with structural requirements (e.g., sprinkler systems and fire retardant doors) and competition from rival facilities were the most significant barriers. Several providers believed they were being driven out of business by larger facilities whose only concerns were making a profit. Recommendations are made regarding the needs of providers in small homes.

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SERVICE NEEDS OF DEPRESSED OLDER ADULTS

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Older adults with mental disorder have comorbid medical, physical, and social conditions that exacerbate their psychiatric problems and complicate their treatment. This study focuses on older adults hospitalized for depression and documents their needs in multiple domains: mental health, physical health, functional dependencies, and socialization. The sample is 100 older adults hospitalized for depression on the geropsychiatric unit of the study hospital and discharged home. Data were collected from patient interviews and discharge planners during the hospital stay as well as medical records. The average number of chronic medical conditions was 4.5. The average number of dependencies in activities of daily living was 5 (with 13 ADL areas). 33% had mild cognitive impairment and 18% had moderate or severe impairment. 30% were mildly socially impaired with 22% scoring moderately or severely socially impaired. Discharge planners noted that 50% of the patients had problems in family relationships, 12% had housing problems, and 10% had substantial financial problems. Findings demonstrate that these depressed elders have high levels of need in multiple domains. Therefore, treatment of older adults with major depression requires services from multiple sectors of care.

MENTAL HEALTH SERVICES FOR OLDER RURAL HOME HEALTH CARE RECIPIENTS

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This paper reports the results of a 3 year feasibility study of providing in-home mental health services to older, rural home health care recipients. Masters level clinicians provided 8-10 sessions of eclectically-oriented treatment to 68 patients who were experiencing problems with stress, anxiety, or depression.

The participants evidenced statistically significant pre-to-posttreatment improvements in overall emotional well-being, as measured by the Positive Symptom Total score of the Brief Symptom Inventory and the severity of problem question from the Target Complaints methodology. Using within-subjects repeated measures analysis of variance with an alpha level of .05 (n=68), the BSI mean reduced from 41.0 (24.4) at pretreatment to 34.8 (22.6) at posttreatment, for a within-subject effect size of .27. Similarly, the severity of problem complaint item mean reduced from 5.7 (2.6) at pretreatment to 3.2 (2.6) at posttreatment for an effect size of .96. Averaging these numbers we found a within-subject effect size of .61.

This study demonstrated that positive changes in emotional well-being can occur for aged, sick, and frail home health care recipients. The study also established the potential value of providing home delivered mental health services to rural dwelling, medically frail elders through the auspices of home health care agencies.

COGNITIVE INDICATORS OF RESPONSIVENESS TO VIDEORESPITE™.

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A series of videotapes developed for use with dementia, Video Respite™ (VR) has been shown to sustain patient interest sufficiently to provide families with some respite from caretaking activities. While these studies have demonstrated the overall utility of VR, it remains unclear what aspects of cognition are required to respond to VR or how to identify these patients. A total of 29 patients hospitalized on a neuropsychiatric unit with dementia (DSMIV) participated in this study. Subjects' responsiveness toward VR and a control tape were defined as verbal and/or nonverbal responses to stimuli imbedded in the video presentations. All viewings were videotaped and subject responses were rated independently by two judges (Kappa = .85). Mean responsiveness was significantly higher toward VR (t = 2.97, $p < .01$). High responders were distinguished from low responders using a median split. Cognitive functioning was assessed using the Mini-Mental State Exam (MMSE) and a discriminant analysis was conducted to eliminate items not associated with VR responsiveness. Results indicated that 6 items tapping language and memory accounted for 43% of the variance ($p < .001$). Receiver Operating Characteristic analysis revealed that the screen items correctly classified 83% of the cases (.93 sensitivity and .64 specificity) compared to 49% using the MMSE ($p < .001$). Implications for clinical screening and treatment will be discussed.

BENEFICIAL EFFECTS OF COGNITIVE AND SOCIAL ACTIVITY AND SOCIAL ACTIVITY ON COGNITIVE AND PHYSICAL FUNCTION ADDRESSING THE "USE IT OR LOSE IT" HYPOTHYESIS

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Growing evidence reveals that participation in community service activities is associated with improved mortality and perceived improvements in cognitive function (e.g., Glass et al., 1997). However, little empirical data are available regarding the protective effects of cognitive activity and social involvement on objective measures of cognitive and physical function. This study examined the associations between levels of cognitive and social activity (e.g., reading, discussing political issues, & volunteering) and psychosocial satisfaction (e.g., feeling useful and needed) and actual cognitive and functional test performance in a non-disabled, non-demented cohort of 366 older women in the Women's Health and Aging Study (WHAS) II. Results showed that increased participation in cognitively and socially demanding activities and greater psychosocial satisfaction were associated with better verbal memory, psychomotor speed, and cognitive flexibility (r's>.33). By contrast the more hours of television watched (neither cognitively nor socially demanding), the poorer was one's cognitive test performance (r's<-.36). Participation in cognitively and socially demanding activities and greater psychosocial satisfaction were similarly predictive of better performance on objective measures of mobility, including stair climbing and walking 4 meters (r's>.30). These associative data suggest that participation in cognitively and socially demanding activities may stem the progression of age related cognitive and functional declines. They thereby provide support for greater promotion of social institutions that enhance older adults' opportunities for cognitive and social activity.

A STUDY OF MENTAL HEALTH SERVICE NEEDS, RECEIPT, AND OUTCOMES FOR ELDERLY ADULTS RESIDING IN FLORIDA'S ASSISTED LIVING FACILITIES

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Assisted living is a crucial policy issue because of its important role in the continuum of long-term care for persons with severe mental illness. The objectives of the current study mandated by the Florida Legislative were to determine the demographic characteristics and health status of individuals residing in assisted living facilities (ALFs) who receive state financial support and to ascertain the mental health services they receive and need. Data from the Medicare claims files and the Statewide Integrated Data Set (IDS) for mental health services are presented to examine the cost of care and service utilization patterns for elderly persons with mental illness. Information from onsite interviews of residents and ALF staff are analyzed to report on the residents perceived need for mental health services, satisfaction and outcomes of care. Study data reveal that persons residing in ALFs have a perceived unmet need for care and that they also receive a significant amount of mental health services. Over 26% of ALF residents receive mental health services and on average these residents receive more than twice the annual cost of mental health services provided to mental health service users not in ALFs. The study results support a need for increased reimbursement to ALFs, increased staff training and changes in the survey process and ALF oversight.

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RACE AND LONG TERM CARE DECISIONS: INSTITUTIONAL VERSUS FAMILY CARE PREFERENCE IN A LARGELY RURAL POPULATION

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African-American elderly people continue to be under- represented in nursing home populations. Is this due to preference among African-Americans for family care as opposed to institutional care? Alternatively, is this under-representation a reflection of state fiscal policies that unintentionally racist? Data from in-home interviews with 604 adults age 66 and over are used to examine differences by race in whether older adults had made plans for long term care and whether their plans included family care or institutional care. Bi-variate results show African-Americans to be more likely than Whites to have made long term care plans (p<.01) and to include family care (p<.01) and institutional care (p<.05) in those plans. These differences by race disappear, however, when socioeconomic and need characteristics are controlled in the multivariate prediction of long-term care preference.

INDIVIDUAL AND FAMILY LONG-TERM CARE PLANNING: THE PROBLEM OF RISK PERCEPTION

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Individual and family long-term care decisions are most commonly made in a crisis; failure to plan for the possibility of long-term care dependency has significant personal and public financial and social costs. This paper presents the results of two studies: a five-focus-group study identified seven challenges or steps toward long-term care planning. A follow-up study of 24 individual interviews probed the dynamics of each of those challenges/steps. The first challenge, the focus of this paper, is the perception of vulnerability to long-term care dependency. Findings suggest wide variety in sources, triggers, and meaning of risk perception. The problem of risk perception is complicated by unpredictability of the onset, nature and course or length of dependency. Beyond this, known rates of dependency in the older population are perceived differently by different individuals: odds that alarm one individual may assuage the next. Implications include: 1) the need for improved statistical tools to help individuals and families estimate personal risk of long-term care dependency; 2) the need for educational tools to stimulate thought about personal vulnerability.

Critical Economic Issues in Long Term Care for the U.S. Elderly – Beyond the Millenium

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This paper examines critical economic issues in LTC beyond the millenium, in 2010 and 2030. Needs for LTC and financial requirements from society and individuals are described. Four areas are addressed: (a) changing needs of elders, (b) role of formal and informal care in meeting the needs and costs, (c) public and private financing mechanisms, and (d) alternative public policy.

The discussion synthesizes recently published estimates. The 1990 age distribution, modified by falling fertility, increased divorce and declining remarriage rates, will increase both the number and proportion of US elders. Increases of 38% (1990-2010) and 125% (1990-2030), will see twice as many ADL-limited elders in the community. Smaller family sizes and increased mobility will reduce informal support. Nearly 26.9 million elderly will live alone in 2030 - a twofold increase, suggesting an increased need for formal LTC. 5.3 million (7.3%) will reside in nursing homes - a threefold increase from 1990. Increased demand for formal health services is unavoidable. Socio-economic trends will exacerbate these influences, increasing demand for subsidies. Unmarried women will remain in the most difficulty. Only 7.9% and 10.1% of elders will be able to afford unsubsidized LTC. To cover more than 40% of elders, will require 7.5% of fixed budgets for LTC insurance – an unlikely allocation.

If trends continue, the compression of morbidity and mortality through health promotion could make a difference, but will require concerted effort by providers, incentives and facilities.

DETERMINANTS OF THE CARE-GIVING FAMILIY'S PREFERENCES FOR ALTERNATIVES TO HOME CARE FOR THE ELDERLY IN KOREA

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Community care is a care mode that supplements home care, and institutional care is a care mode that substitutes home care. The need to develop the community and institutional care is widely perceived by middle class Koreans, though traditional value of filial piety and face-saving culture are deterring the development of alternatives to home care for the elderly. Long-term care policy need to be developed in response to the care-giving family's preferences for alternatives to home care. A survey research was conducted on a random sample of 400 families providing long-term care to their elderly members in their homes to explore the determinants of care-giving family's preferences for alternatives to home care. For the families who prefer to community care, age of the elderly, seriousness of the elderly's chronic disease, home ownership, and family's care burden were statistically significant determinants; whereas for those who prefer to institutional care, gender, types of chronic disease, home ownership and family's care burden were statistically significant ones. More research findings and their policy implications will be also discussed.

CAN ASSESSMENT INFORMATION HELP IN DEVELOPING LONG-TERM MANAGED CARE POLICY?

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An assessment tool has been in use in Maryland since 1987, providing baseline information for community-dwelling elders seeking long-term care services. Medical Assistance has been paying for these Statewide Evaluation and Planning Services (STEPS) evaluations and collecting the data from them. Over 60,000 assessments have been done during the past decade, and the information provided to case managers and shared among local agencies. However, only recently have attempts been made to analyze whether patterns have emerged in the assessments themselves. As the state moves to develop a means to integrate acute and long-term care services for elderly Medicaid recipients, the information available from the STEPS process can be valuable in predicting the types of long-term care services most in demand, and in examining the factors linked with certain care recommendations by professional staff. This paper analyzes the STEPS data in light of these policy needs. (SRPP16)

UPDATING THE LONG-TERM CARE FINANCING MODEL: USING MICRO-SIMULATION TO ESTIMATE LTC USE AND EXPENDITURES

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This paper provides information on updates to the Pension and Retirement Income Simulation Model (PRISM) and the Long-Term Care Financing Model (LTCFM), two related micro-simulation models maintained by the Department of Health and Human Services (DHHS). DHHS uses the PRISM and the LTCFM to examine retirement and health care policy issues under consideration by the Congress and the White House. The LTCFM has been used to estimate costs associated with high profile policy initiatives ranging from the Pepper Commission to the Health Security Act. PRISM is a dynamic microsimulation model designed to simulate the retirement income of the elderly (age 65 and older) population. Users of PRISM can simulate changes in laws and regulations related to pensions and social security, as well as modify economic and demographic assumptions. The LTCFM simulates nursing home and home care use and expenditures for individuals ages 65 and older. It permits analyses of alternative assumptions about the nature of the elderly population in the future (e.g., declining disability rates) and policy scenarios (e.g., tax incentives for long-term care insurance or changes to Medicaid eligibility). Model updates include new input databases and revising the following assumptions: institutional and home care use; work history and retirement; economic and demographic; assets; and disability levels. We are also incorporating acute care into the models. This paper provides an overview of the models, as well as updates.

Wealth, Mortality, and Estate Tax Filings: Evidence from the AHEAD Panel Data

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We develop a strategy for predicting estate tax filings by integrating individual wealth and mortality statistics into a model framework, based on the Asset and Health Dynamics Among the Oldest Old (AHEAD) panel data.

We use data from Wave 1 to estimate household assets subject to estate taxation and calculate the fraction of age 70-plus individuals in 1992 for which the estate value exceeded the filing threshold. We then use panel data from Wave 1 and Wave 2 to estimate the relationship between wealth and mortality, controlling for selected demographic factors such as age, race, sex, and marital status. These mortality rate estimates are used with the required-to-file fraction estimates to predict the number of 1992 decedents on whose behalf an estate tax return should be filed.

Our findings show that wealthier individuals face lower mortality rates. A comparison of our predictions with the Statistics of Income (SOI) estate filing statistics seems to suggest a high level of compliance in filing estate tax returns.

Transition of a County Long Term Care Institution to a Private Geriatric Care Facility: The Challenges for the Millennium.

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Health care entitlement budgets are shrinking and there is increasing competition for available patients and scare dollars. While long term care facilities are a part of the elder care continuum, they face competition from the expanding home and community based services which are providing additional options for consumers. Services and facilities have required revision and reorganization.

In this new environment, facilities must be leaner and more flexible. They need to seize on all revenue-enhancing opportunities which present themselves. Recognizing this need, the county facility was divested and placed under private management.

The process of change has provided many challenges, since it has been occurring in a facility with 24-hour services to vulnerable populations. This has had a major impact on residents, families, staff and the community. These impacts will be discussed as will the strategies used in accomplishing the shift from a rigid institutional focus, to a flexible customer-oriented geriatric center.

OLDER ADULTS IN A FAST FOOD RESTAURANT: AN ETHNOGRAPHIC AND A GROUNDED THEORY STUDY.

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Although senior centers exist in most communities, why are autonomous groups of community dwelling seniors congregating at fast food restaurants? In a Honolulu-based study, ethnographic and grounded theory approaches were used to explore the reasons behind this phenomenon. Preliminary findings suggest that: (1) older adults join and belong to structured groups within which various kinds of informal social support are given and received; and (2) older adults who congregate at fast food restaurants do not frequent other public settings (e.g., senior centers or senior clubs) where formal services are provided. Reasons why fast food restaurants "fit" these older adults better than senior centers are discussed. Implications may include the need to formally recognize these naturally occurring autonomous groups as hidden segments of the older adult population, and that fast food restaurants are significant sites in which primary and secondary public health prevention efforts can be targeted.

THE CONTEXT OF CARE. COSTING FORMAL AND INFORMAL SERVICES TO SENIORS IN RESIDENTIAL CARE SETTINGS

N. Keating, D. Dosman, J. Fast, Departments of Human Ecology and Rural Economy, University of Alberta, Edmonton, AB, T6G 2E7

In Canada there has been a recent shift toward valuing involvement of formal and informal caregivers in the provision of services to frail seniors in residential care. In the 'partnerships paradigm' informal services are valued as part of the move toward more client-centered care. In times of fiscal restraint, informal care is also valued as a costless way to augment formal services.

In a national project to evaluate this paradigm, we used stylized and recall diary time use methods to gather data on 8 domains of direct services to residents in three types of programs: adult family living (AFL), assisted living (AL) and dementia care (DC). Wages of formal caregivers were used to calculate formal service costs. A generalist market replacement wage, calculated from the wages of multi-skilled workers, was used to calculate informal service costs.

Costs of direct care ranged from $14,000 (AL) to $18,000 (AFL) per resident depending upon the program. Informal care accounted for 20% (AFL) to 41% (AL) of costs. We argue that programs that are cost effective from a public perspective may be costly to these formal and informal caregivers who have a variety of out of pocket and personal costs and whose time is undervalued.

BRIDGING TRIBAL AND STATE GOVERNMENTS: MECHANISMS THAT FACILITATE THE PROVISION OF LONG-TERM CARE SERVICES FOR NATIVE AMERICAN ELDERLY.

J. L. Isgrigg, Institute on Aging, P.O. Box 751, Portland State University, Portland, OR 97207

There has been increasing attention to and demand for the provision of culturally supportive long-term care services for Native American elderly. However, state government involvement in the provision of long-term care services for Native American elderly has been minimal as a result of a number of barriers. This research identified several mechanisms that facilitated interorganizational relationships between state and tribal governments.

Using a multiple case study design, this research investigated the interorganizational relationships between Oregon's Senior and Disabled Services Division and tribal governments within Oregon. Data collection techniques included: (a) in-depth interviews with representatives of tribal, state and federal governments, and representatives of American Indian organizations; (b) review of documents; and (c) review of field notes.

Several facilitating mechanisms were identified and appeared at both the individual and organizational levels. At the individual level, specific staff serve as cultural brokers informally (employing personal characteristics, knowledge or experience) or formally (through structurally defined positions as liaisons) providing cultural awareness and sensitivity as well as access to policy makers, resources, and planning activities. At the organizational level, agencies both within and outside of the tribal and state governments serve as cultural intermediaries, providing cultural awareness, education, technical assistance and problem-specific forums.

Specific examples of these facilitating mechanisms are provided and their role in the development and provision of culturally supportive long-term care services are discussed.

A LEVEL OF CARE SCREEN FOR MICHIGAN'S LONG-TERM CARE SYSTEM

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Screening is an important tool for allocating resources in state-sponsored long term care. The State of Michigan sought a 2-stage screen – a telephone and in-person screen – to recommend the appropriate level of care for individuals seeking services through its Home and Community Based Services Waiver for the Elderly and Disabled, and its Care Management Program. Data were collected using the Minimum Data Set for Home Care (MDS-HC) on 813 community-based residents seeking services through these programs. The screening algorithm was to predict a clinically-determined level of care grouped into five categories of care: no services provided (information and referral only), homemaker, personal care, home care, and nursing home care. Most current state (nursing home preadmission) screens are based on Activities of Daily Living (ADL) or Instrumental ADL (IADL) functioning. However, algorithms based only on ADLs or ADLs and IADLs achieved kappa statistics of at most .399 when compared with the clinically-recommended level of care (LoC). The derived MI CHOICE screening algorithm achieved a kappa of .519 when blinded to the level of informal care and recommended LoCs in appropriate frequencies. When informal care was considered in the algorithm, the kappa rose to .534. The telephone screen, to be accomplished within 15 minutes, provides questions that identify clients who do not need services and for whom further screening is unnecessary. The in-person screen will take up to 30 minutes and provide a recommended LoC as part of the decision where state-funded care will be provided on a managed care, capitated basis.

PREDICTORS OF LONG-TERM CARE UTILIZATION AT A CENTER WITH MULTIPLE OPTIONS

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Nursing homes (NH) and community-based long-term care (CBLTC) are two major categories of services available to elderly individuals who require help to function. Studies on the use of health care services by the elderly have not consistently identified factors to predict utilization. Knowing which individuals are likely to select certain options will aid in designing programs to more appropriately target services The purpose of this study is to identify factors associated with the long-term care choices of individuals seen at the Johns Hopkins Bayview Medical Center (JHBMC). The JHBMC is a unique service environment that offers many long-term care options including adult day care, physician house calls, the Program of All Inclusive Care for the Elderly (PACE)and nursing home. 114 individuals or their caregivers were interviewed using an extensive questionnaire to describe demographics, functional and health status, and preferences for care. Participants had a mean age of 80.4, 82.4% were female, and 68.4% were white. In the three months prior to the interview 67% of participants who chose NH reported a fall, compared with 59% for other CBLTC, 33% for PACE and 33% for house calls ($p<.02$). 83% of participants who chose NH reported that their health status was worse than a year prior to the interview, compared with 54% for PACE, 40% for house calls and 48% for other CBLTC.($p<.02$). Other factors such as age, sex, race, level of education, functional status, and cognitive status were not associated with the type of care. A service environment that provides several types of long term care choices may enhance awareness of alternatives. Predictors of long term care choice may be more readily uncovered in such an environment. Knowing what choices informed elderly individuals are likely to make will improve targeting of services.

CASE MIX PAYMENT AND QUALITY ASSURANCE DEMONSTRATION: THE MAINE EVENT

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Over the last decade, Maine's long term care industry has experienced dramatic changes. Since 1989 Maine has participated in the HCFA National Case Mix Payment and Quality Assurance Demonstration Project to develop a case mix payment and quality assurance system for nursing facility reimbursement under the Medicare and Medicaid programs. In 1993, Maine implemented Medicaid case mix payment. Quality assurance monitoring and use of quality indicators (QIs) in the survey and certification process was implemented in 1994. Maine began distributing QIs biannually to nursing facilities in 1995. Data from the Minimum Data Set (MDS+) supports these systems. Other long term care reforms implemented include changes in nursing facility eligibility and increased community care options. This paper highlights the changes observed including - Increase in case mix (up 17% overall, 13% for Medicaid); Decrease in "light care" (physical groups ADL 4-8) residents from 19.5% to 3.7%; 18% decrease in number of residents; Over twice as many Medicaid discharges to home; Increased Medicare admissions from 1818 to 8932 in a year; Increase discharges to hospitals from 3% to 7%; and Overall decrease in Medicaid nursing facility expenditures from over $240M to $202M.

PSYCHOLOGICAL WELL-BEING OVER TIME IN LONG-TERM CARE RESIDENTS: STABILITY IN RESIDENTS OR INSENSITIVITY OF MEASURES?

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Assessing the elderly in long-term care institutions and using the information for outcomes research is increasingly touted as a means of ensuring quality of care. However, we do not have a good understanding of the factors influencing PWB in LTC residents which raises the issue of provider accountability for this outcome in LTC facilities. The data presented examine the suitability of using psychological well-being (PWB) as an outcome variable in terms of its stability and its likelihood of being affected by the actions of providers in assisted living (AL) and nursing facilities (NF) in Oregon.

The sample was composed of cognitively intact residents from a statewide probability sample of AL and NF residents. The initial analysis includes 478 AL residents and 171 NF residents interviewed at baseline who were also reassessed at 6 months, and 1 year. PWB is measured by the Ware SF-36 mental health subscale.

Initial analyses show that the mean level of PWB is stable over time for both AL and NF residents and that mean PWB is higher at each time period in AL as compared to NF residents. Regression analyses show that baseline PWB was the strongest predictor of itself at 6 months and 1 year in both groups, but the lack of effect of baseline social environmental variables such as staff interaction and social involvement was unexpected. Analyses underway are investigating the responsiveness of the PWB measure which has not had widespread use in this population, and the use of linear growth models to study individual change in PWB while accounting for initial PWB status and allowing individual variation in growth rates. We are particularly interested in the relationship between initial status and rate of change.

Aging, Disability Policy & Baby Boomer Growing Pains.

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Center for Policy Research on Aging, UCLA School of Public Policy and Social Research, 3250 Public Policy Bldg, Box 951656, Los Angeles, CA 90095-1656.

As the Baby Boom cohort moves into old age, policy makers will be faced with decisions regarding how to prepare for the coming age wave - a population which will contain unprecedented numbers of individuals with chronic health conditions. As debates regarding health care and disability gain momentum, central to sorting out the public policy puzzle will be the issue of bridging the gap between old-age and disability constituencies and discovering how these two populations, traditionally viewed as distinct interest groups, can work together. The premise of this "shared interests" arguement hinges on the idea that in our aging society, disability will become a fairly universal phenonma. As we learn more about the health of Baby Boomers we find that this cohort is already experiencing a large array of chronic health conditions that impede work and lifestyle to some degree. In old age, these conditions may develop into disabilities that directly affect ADL and IADL abilities. For adults who acquired a disability before age 65, entrance into the aging network can bring a sense of "culture shock" as they leave one system of programs and enter another; one with a different purpose and focus. In this presentation, we will examine the potential of building coalitions among aging and disability interests, factors that influence the policy debates regarding aging and disability issues, the retirement and health outlook for aging Baby Boomers and the implications of the growing population of chronically ill individuals on public and private policy making.

HOW PROACTIVE MONITORING CAN RESTORE DIGNITY IN NURSING HOMES

Harriet A. Fields, LTC Consultant, 1722 19th Street, NW, Suite 604, Washington, DC 20009

Neglect and abuse of our most vulnerable, infirmed and poor exists daily in our nation's nursing homes. Surveyors, consumers, and providers are failing to ensure that government dollars provide the minimum standards of care identified in federal law and regulations. Proactive monitoring accomplished quality of care and quality of life and restored dignity to residents neglected and abused for years. Systems were put in place to improve lives once discarded by a bureaucracy. Ongoing monitoring and presence in the home, demanding accountability from management and administration, ensuring ongoing and current education and training of staff are some of the actions vital to improving care. New models for the mass outplacement of hundreds of residents were developed and implemented. Lessons learned identify areas, such as, professional collaboration, ongoing vigilance, knowledge of the residents by going to the bedside, use of community resources, and visiting at non traditional times are vital for regulators, consumers, and providers to ensure protection of the civil rights of the defenseless before the situation ever escalates to Court action. Finally, government must demand timely accountability for its money.

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The Caregivers' Journey

Five (30 minute ea.)/color videotape/1997
Producer Dr. Geila Bar-David

This five-part video series features 19 diverse caregivers speaking about many common experiences in becoming a caregiver.

The series explores the following themes: ***The Toll***: Acknowledges the tough costs of being a caregiver, including *Anger, Guilt, Loneliness, Frustration, Financial Difficulties and Burnout*. Includes helpful accounts of those caregivers who are several years beyond the loss of their loved-one. Their perspective and humor is a much needed remedy for those who are struggling with the caregiver role. ***Surviving:*** Each of the featured caregivers shares a remarkable piece of advice on how they cope or coped with the emotional, mental and physical costs discussed in *The Toll*. Viewers are encouraged to reflect on what helps them cope and to chose one piece of advice from the caregivers they've just seen. ***Healing***: Caregivers reflect on their sense of loss and on the healing process. Viewers are bolstered by the experience and advice of older caregivers whose perspective and growth may provide some hope for those in despair. ***Quiet Triumphs***: deals exclusively with the good that can come out of the caregiving journey. A moving testament to the human spirit, *Quiet Triumphs* shows how caregivers stretch their capacity for patience and caring, discover the importance of living in the moment, and even go on to lead more caring, fulfilling lives.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

VIDEO FOR STROKE SURVIVORS AND THEIR FAMILIES: THE ROAD TO RECOVERY AFTER STROKE
One (16 minute)/Color video/1998
Produced for Florida Atlantic University College of Nursing by L. Gilstad, University Productions.

The road to recovery after a stroke can be a long and arduous one both for the person who has had the stroke and for the people who care about the person. This video was produced during a federally funded project designed to assist people to adjust after discharge from a rehabilitation in a subacute facility. It begins in a rehabilitation facility and ends six months later at home. The couple describes their ups and downs, the challenges and struggles they faced as they journeyed along the road to recovery from stroke.

Contact: Ruth M. Tappen, EdD, RN, FAAN, Florida Atlantic University College of Nursing, 777 Glades Road, Boca Raton, FL 33431.

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TECHNOLOGICAL INTERACTIONS: OPTIMIZATION OF COMPUTER ACCESS FOR THE ELDERLY TO IMPROVE SERVICE DELIVERY AND QUALITY OF LIFE

S. Kwon, Dept. of Geriatrics Research, Humboldt University Berlin, and Berlin Center of Public Health
E. Steinhagen-Thiessen, Dept. of Geriatrics Research, Humboldt University Berlin

Participants:

A.S. Bucur (Multimedia Division, Andrus Gerontology Center, University of Southern California) Session Introduction: Input Devices and User Interfaces in the Computing Environment – A Short History and Empirical Examples.

R.W. Morrell[1], D.C. Park[2], C.B. Mayhorn[3], K.V. Echt[4], J. Bennett[2] ([1]Gerontology Center, University of Georgia, [2]University of Michigan, [3]University of Georgia, [4]University Veterans Administration Medical Center, Atlanta, GA) Computers, the Web, and Older Adults.

R.D. Ellis, J. Jasper, S. Mettubavi (Institute of Gerontology, Wayne State University) Increasing Access to WWW-Based Service Information Through Participatory Design.

S. Kwon[1,2], R. Nieczaj[1], S. Mix[1], G. Trilhof[1], M. Borchelt[1], E. Steinhagen-Thiessen[1] ([1]Dept. of Geriatrics Research, Humboldt University Berlin, [2]Berlin Center of Public Health) What Do You Want to Do Today? Usability and Usage Patterns of a Geriatric Information System for Mobility-Impaired Elders, Caregivers, and Close Others.

S.J. Czaja (Miami Center on Human Factors and Aging Research, Dept. of Psychiatry and Behavioral Sciences, University of Miami School of Medicine) Interface Design for Older Adults: Enhancing the Usability of Computer Systems.

Discussant:

G. Lesnoff-Caravaglia (Division on Aging, College of Health and Human Services, Ohio University).

This symposium has been organized to approach the use of computers by elderly people empirically from a variety of angles regarding both content and methodology, such as types of technology and target groups.

Particularly, there is a focus on the design and the appropriate selection of input devices and user interfaces that may make technology more accessible to senior citizens. It is asserted that technological features cannot be the only main determinants for effective and efficient usage. Most of the talks in this symposium point out – while technical adaptation to aging changes is necessary and likely for better usability – that psychological and social factors (f.i. motivation and internalization of stereotypes, SES and prior knowledge, and prejudices about computers), participant involvement, training modalities or appropriate staffing for the services offered are just as important for optimizing access and usage of computers to improve elders' quality of life.

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SELF DETERMINATION IN THE FACE OF DISABILITY: OPPORTUNITIES AND CHALLENGES

Chairs: L. Simon--Rusinowitz (University. of Maryland, Bethesda, MD); H.Q. Kivnick (University of MN School of Social Work, St. Paul, MN)

Participants:

M. Iris (Northwestern University Buehler Center on Aging, Chicago, IL); RLH Berman (NE Illinois U). Attitudes toward receiving assistance among community-dwelling elders.

H.Q. Kivnick (U of MN SSW, St. Paul, MN). An elder role model in long-term care: Self-determination in balance with assistance.

W. Lustbader (Pike Market Medical Clinic, Seattle, WA) The slippery slope: When friendship verges on exploitation.

C.C. Williams (Social Work Consultant, LIFESPAN Collaborative, Rochester, NY) Self-determination in nursing homes: No longer an oxymoron.

It is self-evident to say that individual disability constrains personal independence. It is somewhat more informative to explain that: 1) Functional limitations may require an elder to depend on a variety of compensatory services and assistive devices, in order to accomplish life's essential tasks; 2) Dependence on such services and devices interferes, by definition, with self-reliance; 3) The interpersonal process of providing essential service may -- deliberately or inadvertently -- interfere with the recipient's self-determination; 4) Service delivery systems can seriously constrain an elder's self-determination; and 5) Despite needing functional assistance, disabled elders may take advantage of existing opportunities for meaningful self-determination, and may discover / create new opportunities.

This symposium will explore various dimensions of elders' struggles to maintain self-determination and dignity in the face of disability and the receipt of associated services.

Elders from diverse ethnicities demonstrate widely differing attitudes toward needing and receiving assistance, both formal and informal.

Despite requiring live-in assistance, an elder role model maintains control over those elements of her life that are most important to her sense of self, while relinquishing control over others.

When personal care workers accept goods and cash from elder clients, are they engaging in friendship or in exploitation?

Changes in the culture of nursing home management-, staff-, and resident- expectations can restore healthy self-determination to all members of these closed systems, despite high levels of resident disability.

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OH YES, A CANE! EXPLORING THE CONTEXTS OF ASSISTIVE TECHNOLOGY IN AN AGING SOCIETY.

H.J. Moulton, Columbia University School of Public Health, Division of Sociomedical Sciences, 600 West 168th Street, 7th Floor, New York, NY 10032.

Participants:

M. Stineman, (University of Pennsylvania, Ralston-Penn Center, 3615 Chestnut Street, Philadelphia, PA 19104-2676). Assistive Technology: Understanding the Human-to-Machine-to-Environment Interface.

H.J. Moulton, (Columbia University School of Public Health, 600 West 168th St., 7th Floor, New York, NY 10032), D.J. Sheets, (Andrus Gerontology Center, U. of Southern California, Los Angeles, CA 90089), and M.L. Campbell, (Rehabilitation Research and Training Center on Aging with Disability, Rancho Los Amigos Medical Center, 7601 E. Imperial Hwy., Downey, CA 90242). Change in Function and Use of Assistive Technology Among Persons Aging With Physical Disability.

L.N. Gitlin & K. Swenson-Miller, (Community and Homecare Research Division, College of Health Professions, Thomas Jefferson University, 130 South 9th St., Philadelphia, PA 19107). Evaluation of an Assistive Device Program for Low-Income Elderly Renters.

J.R. Watzke, (Aging and Disability Solutions, Vancouver, B.C., Canada). The Assistive Devices Research and Development Project: Initiatives in British Columbia to Promote the Assistive Device Industry.

Discussant:

P.S. Liebig, (Andrus Gerontology Center, U. of Southern California Los Angeles, CA 90089).

Assistive technology has great potential to enhance the independence of older adults with physical disability by narrowing the gap between functional loss and environmental demands. It is promoted as being cost effective, yet the benefits of assistive devices are often constrained by social stigma, fragmented service delivery systems, and limited third party reimbursement. Speakers will identify a theoretical framework from which to consider assistive technology use, examine the relationship between functional disability and use, evaluate the effectiveness of assistive technology for self-care practices, and describe initiatives that foster the development of the assistive device industry. The discussant will focus on implications for policies, programs and services

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NEW INSIGHTS ON THE BIOLOGY OF LONGEVITY.

N Barziali, Division of Geriatrics, and the Diabetes Research and Training Center, Albert Einstein College of Medicine, 1300 Morris Park Ave, Belfer #701, Bronx, NY, 10461.

Participants:

S Lichtsteiner (Geron Corporation, Menlo Park, CA 94025).
The Role of Telomerase in cellular senescence.

S Hekimi, (Department of Biology, McGill University, MontrÈal, QuÈbec, Canada H3A 1B1).
The molecular characterization of the life span extending clock genes of C. Elegans.

N Barziali, (Albert Einstein College of Medicine, Bronx, NY. 10530)
Revisiting the role of fat mass in the life extension induced by caloric restriction.

T Perls (Division of Geriatrics, Harvard Medical School, Boston, MA 02115).
Familial risk factors for achieving extreme old age: paternal and sibling age.

Discussant:

K Meineker (Massachusetts General Hospital, Harvard Medical School, Boston, MA 02115)

This symposium will update the audience on the recent major advances in understanding the biology of longevity from the cellular level to humans.

At the cellular level, new insight on the role of telomerase will be reviewed. Telomerase-expressing clones have have exceeded their normal life-span by at least 20 doublings, thus establishing a causal relationship between telomere shortening and in vitro cellular longevity.

The nematode worm C. Elegans is a model system for the study of the genetic basis of aging. One of the pathways recently studied is defined by mutations in four maternal-effect genes which interact genetically to determine both the duration of development and longevity.

Caloric restriction extends life in animal models significantly, and has many positive systemic effects which can now be explained by the decrease in plasma levels of peptides, cytokines, complement factors and substrates derived from fat cells. These factors and examples of their role in disease and longevity which will be further demonstrated.

Centenarians are clearly exceptional in their pattern of mortality and may demonstrate resistance to variety of aging processes. The familial paterns of longevity indicating a role for genetics over environment influences on longevity will be further presented.

In this symposium we will further discuss the relevant of these new discoveries to human aging.

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OVERCOMING RESISTANCE TO EVIDENCE-BASED CARE: THE CASE OF PHYSICAL RESTRAINT

N Strumpf & L Evans, University of Pennsylvania, School of Nursing, Philadelphia, PA 19104-6096

Participants:

M.B. Happ (University of Pennsylvania), Maintaining technologic access: Physical restraint use in critically ill older adults.

E. Sullivan-Marx, M. Baumgarten, N. Strumpf, L. Evans, G. Maislin, & J. Carson (University of Pennsylvania), Physical restraint use among hospitalized nursing home residents with hip fracture.

E. Capezuti, N. Strumpf, L. Evans, & G. Maislin (University of Pennsylvania), Effect of nighttime physical restraint removal on falls among nursing home residents.

N. Strumpf, L. Evans, E. Capezuti, & G. Maislin (University of Pennsylvania), The effects of an advanced practice nurse intervention on physical restraint use among hospitalized nursing home residents.

K.A. Talerico & M. Bourbonniere, L. Evans, & N. Strumpf (University of Pennsylvania), Barriers and catalysts to restraint-free care.

Discussant: L. Mion (The Cleveland Clinic, Cleveland, OH)

During the past decade, studies of physical restraint have strengthened the empiric base for individualized care with frail elders. Although prevalence of physical restraint has declined in long term care, restraints persist in hospital settings. Even with an evidence base that is solid and compelling, modifying beliefs and altering the culture of care are complex and challenging processes. In this symposium, five data-based papers explore characteristics associated with restraint use across settings and analyze the context in which interventions are employed to change practice.

Happ describes use of physical restraints with older adults in critical care and notes the impact of voicelessness, limited awareness, and danger on nurses' decision making. Sullivan-Marx documents dichotomies in physical restraint use and outcomes for nursing home residents versus other older adults hospitalized for hip fracture. Capezuti presents evidence that nighttime physical restraint removal does not lead to increases in falls from bed in nursing home residents, and discusses implications for hospitalized older adults. Strumpf & Evans demonstrate that an advanced practice nurse intervention reduced, but did not eliminate, restraint use for hospitalized nursing home residents. Talerico & Bourbonniere conclude with a description of challenges and successes encountered in achieving restraint-free care.

MAINTAINING TECHNOLOGIC ACCESS: PHYSICAL RESTRAINT USE IN CRITICALLY ILL OLDER ADULTS.

M. B. Happ, University of Pennsylvania, Philadelphia, PA 19104.

In critical care settings, physical restraints are used primarily to prevent inadvertent removal or disruption of technologic devices. This paper presents four case examples of the use of physical restraint with critically ill older adults from a participant observation study in medical and intermediate level intensive care units. These vignettes illustrate the impact of voicelessness, limitations of awareness, and the characteristic dangers of technologic devices on nurses' decisions to apply physical restraints. Strategies to maintain devices in *unrestrained* critically ill older adults are also described. Nurses used repeated

explanations, frequent visualization, diversion, deception, and watchful families to keep devices secure without physical restraint.
(NINR #NR072030-02)

PHYSICAL RESTRAINT USE AMONG HOSPITALIZED NURSING HOME RESIDENTS WITH HIP FRACTURE

E.Sullivan-Marx, M. Baumgarten, N.Strumpf, L.Evans, G. Maislin, J. Carson. University of Pennsylvania, Philadelphia, PA 19104

Frail older adults experiencing hip fracture require significant rehabilitation to maintain pre-fracture function. Physical restraint limits rehabilitation and may contribute to detrimental outcomes. This descriptive study examines factors associated with restraint use among nursing home residents hospitalized with hip fracture by employing secondary analysis of a large data set involving hip fracture patients hospitalized in urban medical centers in NJ, PA, VA, and TX from 1983-1993. Mean age of subjects (N=8333) was 82.6 years, 79.9% were female, 87.4% were white, and 22.3% were admitted from a nursing home. Restraint use was greater for nursing home residents than those admitted from other sites (59.4%[n=1103] v 29.7%[n=1921]; RR=2.0; 95% CI=1.9, 2.1; p=0.001). Crude analysis indicated that restraint use was more likely for nursing home residents (OR=2.1, 95% CI=1.8, 2.3) and nonwhite patients (OR=1.3, 95% CI=1.1, 1.5). Moreover, the impact of pre-admission nursing home status increased (Breslow-Day Test, chi-square=25.19, p=0.001) as a function of increasing dependence in activities of daily living (ADL), measured by the Katz ADL scale prior to admission (use of assistive device [OR=1.2, 95% CI=1.1, 1.4], needing assistance [OR=2.9, 95% CI=2.5, 3.3], and dependence [OR=3.8, 95% CI=2.8, 5.1]. Analysis of contributing factors (main and interactive effects) such as mental status, and outcomes including morbidity, discharge status, functional status at discharge, and length of stay, will be presented. Implications of findings regarding individualized approaches to care of older adults with hip fracture will be discussed.

EFFECT OF NIGHTTIME PHYSICAL RESTRAINT REMOVAL ON FALLS AMONG NURSING HOME RESIDENTS

E. Capezuti, N. Strumpf, L. Evans, G. Maislin, University of Pennsylvania, Philadelphia, PA 19104.

There is ample evidence that physical restraint reduction does not lead to increased falls or fall-related injuries. This secondary analysis explores more specifically the relationship between removal of nighttime (in bed) restraint use and nighttime falls.

Using data from a longitudinal, prospective study aimed at reducing restraints, we tested the effect of removing restraints by comparing two groups: Restrained in bed at pre-intervention but not restrained post-intervention (n =42), or restrained in bed at both pre- and post-intervention (n =10). Data were examined for nighttime (10 pm-6 am) physical restraint use, fall rates, and clinical characteristics.

At baseline, there were no significant differences between the groups in mean age (83 v 84.5), scores in fall risk (5.5 v 4.7) and behavioral symptoms (5.6 v 4.4). The group that continued to be restrained was slightly more physically (27.8 v 22.2) and cognitively (1.5 v 6.5) impaired and much more likely to demonstrate sleep disturbances (30% v 5.2%). During a six month period following the intervention, those with restraints removed had similar fall rates compared to those who continued to be restrained (9.5% v 10.0%).

Nighttime physical restraint removal does not lead to increases in falls from bed in older nursing home residents. Although restraint use at night has been markedly reduced in nursing homes, it remains a common practice among hospitalized older adults. We should continue to focus efforts on developing new, individualized approaches to reduce risk of falling from bed among frail elders. (NIA #R01 AG0 8324)

THE EFFECTS OF AN ADVANCED PRACTICE NURSE INTERVENTION ON PHYSICAL RESTRAINT USE AMONG HOSPITALIZED NURSING HOME RESIDENTS.

N. Strumpf, L. Evans, E. Capezuti, & G. Maislin, University of Pennsylvania, Philadelphia, PA 19104.

Using a prospective field experiment with a phase lag design, we tested the impact of an advanced practice nurse (APN) intervention on physical restraint use among hospitalized nursing home residents. Resident subjects were admitted from a single nursing home to an urban medical center; all had been restraint-free prior to hospitalization. For the experimental group (n=89), an intervention protocol was implemented by a gerontologic APN, emphasizing individualized assessment and care planning without physical restraints. Those in the control group (n=64) received usual hospital care. There were no statistically significant differences in mean scores between the experimental and control groups during hospitalization in physical function (28.73 v 28.82), behavioral symptoms (3.17 v 1.99), fall risk (6.01 v 6.95), mental status (11.08 v 8.52), number of medical treatments (2.07 v 3.91), treatment interference (1.50 v 1.41), number of days in critical care (0.49 v 0.94), proportion of days with psychoactive drugs (0.35 v 0.32), mobility (9.78 v 9.98), length of stay (6.48 v 7.23) and acuity (4.29 v 3.61). Comparisons between groups for any restraint use (yes/no) showed modest but nonsignificant differences (25.84% v 31.25%). Daily restraint use, however, was significantly less for the experimental group (2.25% v 15.63%; chi square, p=0.002). The odds ratio for the magnitude of the intervention effect was 0.12 (95% CI: 0.03, 0.59). Controlling for pre-hospitalization variables one at a time did not appreciably change the odds ratio. Hospital restraint use for nursing home residents is discussed in light of hospital restructuring which occurred coincidental wit' the intervention. (NIA #R01 AG0 8324)

Barriers and Catalysts to Restraint-Free-Care

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The use of physical restraints in the care of older adults continues despite our knowledge of adverse events. In a study to test the effects of an advanced practice nurse (APN) intervention on hospitalized nursing home residents, an APN was available for consultation aimed at decreasing the use of physical restraints. When qualitative data were analyzed, a dramatic shift in emphasis was found. Institutional needs took precedence over individual resident needs for the provision of acute care. Barriers to individualized acute care included transient staffing patterns, lack of continuity in care planning, inconsistent policies and procedures, limited access to resources other than physical restraints, emphasis

on task efficiency, and constraints on nurse autonomy. Along with these more visible barriers were the persistence of staff beliefs concerning liability issues, beliefs that treatment interference could not be managed without physical restraint, and lack of knowledge about care of patients exhibiting behaviors associated with altered cognition. Success stories illustrate how care may be improved for this population, including enhancement of information transfer between nursing home and hospital.
(NIA #R01 AG0 8324)

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PATTERNS OF HEALTH AND ILLNESS ACROSS CULTURES.

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Participants:

J. B. Averill (Regis Univ., Denver, CO 80221) Health Care Experiences of Elderly Rural Latinos

R.J. Martinez (Univ of Colorado Health Sciences Center, Denver, CO 80262) Close Friends of God: An Ethnography of Health of Older Hispanic People

R. Davis (Univ of Colorado Health Sciences Center, Denver, CO 80262) Quiet Pride: The Chronic Illness Journey of Rural Older Adults

J.C. Gladden (Univ. of Mary, Bismarck, ND 58504) Decision-Making of Rural Older Adults During Subacute Care Transitions

M.A. Anderson (Weber State, Ogden,UT 84408) Providing a Place of Comfort: Interventions for Nursing Home Residents with Dementia

Discussants:

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J.G. Congdon (Univ of Colorado Health Sciences Center)

Cultural, rural, environmental, socioeconomic contexts and aging profoundly influence patterns of health, health seeking behaviors, chronic illness, and health care transitions of older adults. This symposium includes five separate but unifying nursing research studies focusing on the experiences of health, chronic illness, health care interventions, and health care decision making across three cultures (Hispanic, African-American and White), two settings (rural and urban), and four geographic areas. All researchers utilized qualitative designs to present emerging patterns of health and illness as reported by elderly persons, their family members, and care givers. General and specific implications for the interdisciplinary delivery of culturally sensitive health care will be discussed.

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Assessing Strength and Flexibility in the Frail Elderly: a practical workshop on outcome measures which are reliable, valid, and sensitive to change with exercise, Nancy A. Ecclestone, BA, BSc, Director, The Centre For Activity and Ageing, The University of Western Ontario, London, Ontario, CANADA, N6A 3K7, Chair

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Strength and flexibility are common outcome measures in studies involving exercise and elderly people. Frail institutionalized elderly people present a challenge for assessing strength and flexibility because they have many co-morbid conditions, have decreased endurance and mobility, are at risk for injury due to severe weakness and joint problems, and are often not able to leave the institution to be assessed at a testing centre. There is a need for reliable, safe, and cost-effective outcome measures to facilitate the study of very frail institutionalized people and demonstration of the efficacy of interventions. This workshop will present reliable, valid, and sensitive outcome measures for strength and flexibility that are cost effective and safe for frail institutionalized elderly people. In addition, the workshop will serve as a forum for the exchange of ideas and experiences in this area, and for problem solving, with workshop participants. The workshop will have both theoretical and practical components. The workshop will: 1) review selection criteria for outcome measures which are appropriate for frail elderly individuals; 2) present the reliability and validity of the belt-resisted method of assessing strength and the modified sit-and-reach test for measuring flexibility; 3) describe barriers, considerations/precautions, and feasibility for performing these assessments on frail elderly people on site; 4) practical demonstration, with participation, of the skills and techniques required to perform these measures. With the outcome measures demonstrated in this workshop, objective, reliable, and valid evidence of the benefits and efficacy of exercise programs for the frail elderly living in long-term care institutions can be obtained on site, in an efficient, cost-effective manner. Participants may bring their own hand-held force dynamometer to learn how to perform the technique with their own available equipment.

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CREATING A THERAPEUTIC RELATIONSHIP WITH NURSING HOME RESIDENTS IN THE LATER STAGES OF ALZHEIMER'S DISEASE: CAN IT BE DONE?

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Problem and Purpose: Inquiry into the emotional impact of dementia on the individual in the later stages of AD is a recent phenomenon. Presently most care is primarily task-oriented and relationship impoverished. The purpose of this study was to explore the possibility of developing therapeutic relationships with individuals in the middle and later stages of AD.

Sample and Setting: This purposive sample consisted of 42 residents from 2 large urban nursing homes who were diagnosed with AD.

Design: This was a qualitative study using narrative analysis. We examined audiotaped conversations between advanced practice nurses and individuals in the middle and late stages of AD for evidence of therapeutic interactions.

Findings: Despite the subjects' severe memory impairment, there were evident patterns in the way participants behaved at different stages of the relationship. Typically, residents expressed disinterest, distrust or irritability with the nurse initially but in time this gave way to affection and an expressed desire to continue the therapeutic relationship with the nurse for the majority of the sample. Those who did not (7) had severely limited speech, perseverative speech, or no speech at all. Further study is needed to design verbal and nonverbal interventions which could ameliorate the emotional impact of AD and improve quality of life.

ESTROGEN USE AND FUTURE PERFORMANCE ON A COGNITIVE SCREEN.

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The effect of postmenopausal use of estrogen on women's cognitive functioning is unclear. Studies based on population representative samples are rare.

Data for this cohort study come from in-person interviews with 1907 Black and White women age 65 and older, cognitively intact (as assessed by the Short Portable Mental Status Questionnaire [SPMSQ]) at entry into the Duke EPESE study. We examined the relationship of recent and past (vs. never) use of estrogen and extended (>2 years) and brief (2 years or less) use (vs. never) as predictors of incident impairment over a 6 year time period.

Bivariate analyses suggested that recent and extended estrogen use was significantly protective of cognitive performance on the SPMSQ (OR=.42, 95% CI=.21-.86; .32, .13-.81 respectively). However, after controlling for demographic and health characteristics the association was severely attenuated (ADJ OR=.86, 95% CI=.41-1.80; .84, .34-2.10).

As an independent predictor, use of estrogen is not protective of future cognitive performance.

NIA Contract No.: N01-AG1-2102

DISEASE CHARACTERISTICS RELATED TO INSTITUTIONALIZATION IN PERSONS WITH ALZHEIMER'S DISEASE

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In a longitudinal study of 410 persons with Alzheimer's disease (AD) from a dementia clinic, relations between disease characteristics and risk of institutionalization were evaluated. Baseline and four annual follow-up examinations consisted of a cognitive test battery and an informant interview to assess functional status and behavioral symptoms. There were 1205 person-years of observation; 155 participants entered an institution during the follow-up period. Based on a proportional hazards model, adjusting for demographic and social network characteristics, entry into an institution was independently associated with the presence of hallucinations, the presence of physical aggression, more severe depression scores, and greater cognitive impairment. Although delusions, urinary incontinence, and physical function impairment were significant univariate predictors, these variables were not significant in the context of other disease characteristics. These data highlight the apparent influence of behavioral symptoms on decisions to institutionalize persons with AD.

(Supported by NIA grants AG09966 and AG10161)

Relationship between NSAID Exposure and Alzheimer's Disease In A Population-Based Case-Control Study

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The epidemiologic data on the putative protective effects of anti-inflammatory agents for dementia are limited and inconsistent. Much of the previous research has been hindered by small samples and self-report or surrogate drug information. This study utilized prescription drug data from Pennsylvania's Pharmaceutical Assistance Contract for the Elderly (PACE) program and mortality data from the Pennsylvania Department of Health. A case-control design was used to examine the effects of varying spans of use (from approximately 1 to 36 months) of nonsteroidal anti-inflammatory drugs (NSAIDS) on the odds of having an ICD-9 code for Alzheimer's disease listed on a death record. Cases included 324 individuals who died in 1990 or 1991 and had an ICD-9 code for Alzheimer's disease. Controls consisted of 5,913 age and sex matched individuals who also died in 1990 or 1991 and had no record of dementia. Analyses were run separately for men and women. Following adjustment for potential confounders, a significant decrease in disease odds was obtained for women classified as "High" users of NSAIDs (i.e., those exposed to greater than 17 prescriptions in the last 36 months of life) (OR = .37, 95% CI = .19 - 83). In order to control for possible differences in drug utilization between cases and controls, additional analyses were conducted using a specially formed reference group. The results of this study support the notion that NSAID exposure is protective against Alzheimer's disease and could be indicative of an immune-mediated autodestructive etiology.

ASSESSMENT OF ACUTE CONFUSION IN ELDERLY RESIDENTS WHO RESIDE IN LONG-TERM CARE FACILITIES

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Acute Confusion has received little attention in long-term care (LTC) due to difficulty differentiating acute and chronic confusion. The purpose of the study was two-fold (1) to determine the instruments' ability to discriminate acute confusion in this population and to (2) describe acute confusion in LTC. Diagnosis of acute confusion was made by the investigator using DSM IV Criteria. This study evaluated a purposive sample of 75 LTC residents for acute confusion with the MMSE, GDS, NEECHAM, CAC-A, CAC-B, & VAS-AC. The sample was made up of 3 groups: cognitively intact, dementia without acute confusion and acutely confused (w/or w/out dementia). 26 residents were found to be acutely confused. The NEECHAM, CAC-B and the VAS-AC were found to discriminate acute confusion in this sample. Sensitivity, specificity, reliability and validity data are provided. This study revealed a 34% mortality rate in the acutely confused. Risk factors identified are compared to risk factors reported for the acute care setting. 54 % of the total sample scored as depressed on the GDS. Behavior patterns of acute confusion are described.

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PSYCHOTROPIC DRUG WITHDRAWAL AND AN EXERCISE PROGRAM TO PREVENT FALLS

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Successful interventions to reduce falls in elderly people have included exercise programs, and a multifactorial approach in the home. We investigated the effectiveness of two interventions in a randomised controlled trial of 93 women and men aged 65 years and older in a general practice setting. Using a new intervention, psychotropic drugs were gradually withdrawn (double blind), and a home based exercise program, previously shown to be successful in reducing falls, was implemented (single blind).[1]

After 44 weeks the relative hazard for falls in the drug withdrawal group compared with the group taking their original medication was 0.35 (95% CI 0.15–0.82). The risk of falling for the exercise program group compared with those not receiving the exercise program was reduced but did not reach significance. After 24 weeks balance, strength and flexibility measures had improved in the exercise program group.

Psychotropic drugs, once established, are very difficult to stop. This study shows that withdrawing this medication lowers the risk of falling by 65% but permanent withdrawal is very difficult to achieve.

[1] Campbell et al. BMJ 1997;315:1065–9

Relationship of Performance Measures to Falls and ADL in Nursing Home Patients.

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Measures of neuromuscular function predict falls, fracture, and functional status in community dwelling elderly, but relationships in nursing home (NH) residents are not clear. Gait speed, grip strength, and balance (Berg Balance scale) were measured in 549 ambulatory NH residents (mean age 84 yrs, 82% women, 87% white) from a representative sample of nursing homes in Maryland. Six month fall history was collected by nurse interview; ADL dependency was derived from the most recent minimum data set (MDS). Least square means were used to compare performance scores between fallers (≥1 fall, N=210) and non-fallers, and between those dependent in ≥ 3 ADL (N=214) vs. those more independent, controlling for age and cognition. Balance and gait speed but not grip strength were significantly greater for non-fallers than for fallers (p<.0001); low balance scores, slow gait speed and decreased grip strength were significantly associated with increased dependence in ADL.(p<.0001)

	Gait Speed* (m/s)	Grip Strength* (kg)	Berg Balance* Scale (0-56)
Fallers	0.55 (0.07)	12.3 (0.39)	12.4 (1.18)
Non-fallers	1.10 (0.06)	11.4 (0.49)	21.5 (0.93)
ADL-dep.	0.24 (0.07)	10.5 (0.48)	6.1 (1.01)
ADL-indep.	1.27 (0.05)	12.9 (0.38)	25.7 (0.81)

*least square means (se), controlling for age and cognition (MMSE)

Similar to community studies, gait speed, balance and grip strength are related to ADL and fall history, but the magnitude of the relationships may differ for NH residents, particularly for grip strength. Results should be confirmed in prospective studies in this population.

RISK OF WRIST FRACTURES IN FORWARD FALLS ONTO OUTSTRETCHED ARMS.

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In the most common type of fall, the forward fall, distal radius fractures occur approximately four times more often than any other arm injury. To elucidate the biomechanical factors governing the magnitude of the hand-ground impact force, we performed computer simulations of sagittally-symmetric forward falls using a three link biomechanical model of the human, and a given impact surface. In the first phase of the forward fall, the velocity just before impact was primarily determined by the loss in potential energy from the upright posture; hence, by decreasing walking speed from that used by healthy old adults (1.5 m/s) to a speed more characteristic of frail adults (0.5 m/s), impact velocity with the ground was reduced by less than 15%. In the later phases, impact and arrest, the configuration of the arms and their muscular activation largely determined the outcome of the fall. At impact, even without including muscular activation, the three link model demonstrated that landing with straight arms increased impact forces more than threefold over landing with elbows flexed 35°. For a typical fall, the peak forces ranged from less than 2 x body weight (BW) to more than 6 x BW. A 2 x BW impact force is lower than the known fracture strength of the forearm in older women, while a 6 x BW force exceeds the highest reported fracture strengths. The model suggests that an individual must make a trade-off between limiting the risk of arm injury in the second phase, impact, by utilizing an adequate amount of elbow flexion, and protecting against head injury

in the third phase, full momentum arrest, by maintaining an adequate amount of elbow extension for ground clearance.

BENZODIAZEPINES AND THE RISK FOR FALLS: A ROLE FOR METABOLIC PATHWAY?

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Benzodiazepines are eliminated from the body through two different metabolic pathways: an oxidative bio-transformation and a non-oxidative process. It has been suggested that benzodiazepines which are transformed by conjugation may be safer in the elderly than those bio-transformed by oxidation, but no studies have addressed this specific issue. We studied 379 cases who fell during their hospital stay and 1,914 controls to evaluate the relative contribution of metabolic pathway, elimination half-life, indication, dosage to the increased risk of falling. Multivariate logistic models showed that falls were significantly associated with elimination half-life (short half-life: OR 1.4, 95%CI, 1.1-1.9, long half-life: OR 2.2, 95% CI, 1.4-3.8), and dosage (low: OR 1.3, 95%CI, 0.9-1.8, intermediate: OR 2.0, 95%CI, 1.4-2.8, high: OR 2.8, 95%CI, 1.0-2.5). A strong dose-related increase of the risk for falling was observed among users of oxidative benzodiazepines, not of non-oxidative benzodiazepines. It is concluded that benzodiazepines undergoing oxidative metabolism should be used with caution in elderly patients, especially at larger doses.

ORTHOSTATIC HYPOTENSION AND INCIDENT FALLS IN INSTITUTIONALIZED ELDERS.

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To examine prospectively the relationship between orthostatic hypotension (OH) and falls, 837 long-stay elders (mean age 87 years; 80% women) in 40 nursing homes (NH) were stratified by a history of falls in the past 6 months, and followed for an average of 1.2 years. Trained nurses obtained within-day heart rate and orthostatic blood pressure (BP), supine and at 1 and 3 minutes standing, before and after breakfast, and again pre- and post lunch, using a random zero sphygmomanometer. Medications, comorbidity, and orthostatic symptoms were also evaluated. Multivariate Cox survival analyses for previous non-fallers showed no relationship between OH and falling, but among previous fallers, OH at baseline was associated with incident falls (RR=2.1, 95% CL: 1.4 - 3.1). Psychoactive and anti-parkinsonian drugs were also predictive of falls. There was a relationship between the number of OH episodes and falls (RR=2.6, 95% CL: (1.7 - 4.6), but no interaction between OH, meals and falling. Thus, OH is a risk factor for falls in NH residents with previous falls, even after controlling for psychoactive or parkinsonian drug use. Postural BP should be carefully monitored and OH should be treated in elderly residents with previous falls.

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BUILDING A SELF-SUSTAINING COMMUNITY SYSTEM OF HEALTH SUPPORT FOR THE ELDERLY

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During a time when health care budgets are under significant restraint emphasis is being placed on community collaboration around health issues and self-help models of community development. The Cherryhill Community Project is a participatory action project designed to: (1) explore whether elderly citizens can become more involved in the planning and provision of their own health services; (2) build community capacity and strengthen informal community health resources; and (3) create a *sustainable* system of shared decision-making between the community and formal health system. Study Population: 2953 residents living in a 13-building apartment complex (2325 units) and 64 businesses under a single management group, along with city-wide health professionals. Methods: A community systems process that fosters community-wide, long-term commitment and partnerships among citizens, local businesses, city-wide health service providers and policy makers, was utilized. Societal change theory, theories of voluntarism, individual and community empowerment provided the conceptual framework to guide each phase of this project. Results (Phase I): A capacity inventory revealed a plethora of informal, untapped community health resources (158 citizens offered to share their skills with others in their community requiring assistance; skills offered spanned 58 different categories). A community survey (response rate = 53%; n=1231; mean age 72 yrs. ± 15 yrs. S.D.; range 19-96 yrs.) revealed 61% of the community are single, elderly women living alone, the oldest citizens (85+ yrs.) live in the community longest (14+ yrs.), the higher the age the less well people perceive themselves, and health service utilization increases with age. In 5 yrs. time it is projected >50% of the community will be over the age of 80 yrs., with 20% demonstrating signs of dementia. If this trend continues, it is expected that health service needs will increase substantially. (Phase II): A self-sustaining community action partnership model was collaboratively created; 14 citizen facilitators trained; and 9 community action teams implemented. CM11

PROVIDING PHYSICIAN HOME VISITS TO HISPANIC ELDERS.

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Access to health care by Spanish speaking elders has been limited by language barriers, cultural differences and health beliefs. The physician house call program at Brooklyn Hospital Center provides primary and palliative care services to homebound elderly in northern and central Brooklyn, where a large number of Spanish speaking patients live.

Since the summer of 1996, we have provided services to 18 Hispanic elders, ranging in age from 60-105. Most lived with their daughters, 4 with sons (including 1 married couple), and 4 lived alone with the help of home attendant services. The primary diagnoses were Alzheimer's disease and stroke, with cancer, end stage COPD and CHF as the other main causes of disability. The number of home visits has ranged from 1-11. Of the 18 patients, only 8 have been hospitalized since starting the program. Three patients died at home with the support of the program. Only 1 has been placed in a nursing home.

Referral for physician visits occurred in the late stages of disease, usually though the Home Health Agency or word of mouth. Despite the delayed access to physician services, family expectation of MD availability has often been unrealistically high. Other trends have emerged: 1) A strong interest in keeping the patients at home; 2) A selective use of family members—usually one individual is chosen to bear the burden of responsibility for medical care and decision making and other family members are often deliberately left ignorant in order not to "worry" them; 3) A reluctance to implement Advance Directives, with an assurance that things will be discussed "when the time comes;" and 4)The importance of physician fluency in Spanish -- this enabled the physician to diagnose early depression and dementia that went unnoticed by caregivers and other health care providers.

GERIATRIC TRAINING NEEDS AT COMMUNITY HEALTH CENTERS: FINDINGS FROM MASSACHUSETTS & MICHIGAN

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The need for geriatric clinical services within community health centers (CHC) is well known. Recommendations have been made to expand staff training, and the variety of services available to elderly CHC parients.In order to implement these recommendations, training needs assessments must be conducted at CHCs. So far, few have been done. This paper presents the results of surveys of geriatric training needs in CHCs in Massachusetts & Michigan (total n=44). Results show a high proportion of 65+ patients using CHCs in both states. A high proportion of patients in the 45-65 yr. cohort were seen in the Michigan sample. CHC staff were found to have little training in geriatrics. The top training need areas were consistent in both states, and included: mental health, clinical assessment, pharmacology, reducing access barriers, and case management. The most commonly-identified obstacle to training was the inability of CHC staff to attend off-site trainings. Geriatric education center (GEC) staff may be able to offset the lack of CHC practitioners who have training in geriatrics by strengthening efforts to recruit CHC practitioners into GEC continuing ed. and certificate programs. GEC staff can also help increase the pool of geriatrics-trained practitioners at CHCs by conducting trainings on site at centers.

OUTCOMES OF OLDER PATIENTS IN AN AMBULATORY DETOXIFICATION PROGRAM

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Between 1995 and 1997, 80 alcohol-dependent patients 60 years of age or older were enrolled in a Veterans Affairs ambulatory detoxification program. These patients represented 3% of the 2633 total patients enrolled during the 3-year study interval. The older patients ranged in age from 60 to 79 years (average age 65.0 ± 4.4 years), and they self-reported having an alcohol problem for 1 to 56 years (average problem duration 17.4 ± 16.0 years). Their enrollment in the ambulatory detoxification program ranged from 1 to 11 days (average enrollment duration 4.2 ± 2.0 days), and 23 of them (29%) received chlordiazepoxide during detoxification in a symptom-triggered protocol. For those older patients who received chlordiazepoxide, total dosage during detoxification ranged from 25 mg to 550 mg (average total dosage 181.5 ± 144.8 mg) administered over 1-7 days (average medication duration 3.1 ± 1.7 days). Only 1 older patient (1%) required admission to an inpatient detoxification unit for severe withdrawal, and 11 older patients (14%) either dropped out of treatment or were discharged because they were unable to comply with the program rules. The remaining 68 patients (85% of the older patients) successfully completed outpatient detoxification and were referred to substance abuse rehabilitation. This completion rate is comparable to rates previously reported for younger patients undergoing ambulatory detoxification. Our results suggest that many patients 60 years of age or older can successfully detoxify from alcohol in an outpatient setting.

INFLUENZA IMMUNIZATION IN A GROUP OF FRAIL HOMEBOUND ELDERLY-POTENTIAL ROLE FOR INTERDISCIPLINARY CASE MANAGEMENT.

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Our interdisciplinary case management team supervises long-term care services for more than 3,000 culturally diverse clients (80% Hispanic) who meet Florida Medicaid financial eligibility requirements and display sufficient impairment in functional status to qualify for nursing home admission. The goal of this program is to enable frail elderly to remain in their homes through provision of home-makers, nursing visits, rehabilitation etc. with an emphasis on health maintenance and prevention. Influenza is a leading cause of mortality in the elderly. Prevention by yearly immunization has been shown to decrease both morbidity and mortality and specific guidelines have been established. Compliance with these recommendations however, is routinely dependent upon physician and client education and behavior. To monitor the effectiveness of this passive approach we collected data (1996-1997) on rates of immunizations in our clients and reasons for those not receiving immunizations. 251 of 643 (39%) of clients sampled received immunizations. Reasons for non-immunization included: patient not keeping appointment; patient not offered; patient refused; patient homebound; physicians did not believe in immunization. In conclusion: Immunization rates were disturbingly low in this vulnerable group. Both physicians and clients were responsible for the low rates. We have developed a bilingual interventional model to target both physician and client through direct visits, phone contact, and printed educational material.

FEASIBILITY STUDY OUTCOMES: COMMUNITY-BASED MENTAL HEALTH SERVICES WITHIN A MANAGED CARE PROGRAM FOR OLDER ADULTS

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This one-year project studied the feasibility of delivering mental health services within a managed care context to community dwelling older adults at risk for hospitalization because of behavioral/psychiatric symptoms of dementia and other mental disorders. The Older Adult Behavior Crisis Service (OABCS) was designed to provide early and rapid response to behavioral crises. Specific aims related to clinical outcomes were to determine if OABCS: 1) reduced the frequency and severity of behavior/ psychiatric symptoms of older adults; 2) changed caregivers' perception of symptoms as troublesome/ difficult to manage; and 3) resulted in improvement in clients' overall functioning, decreasing the need for psychiatric hospitalization.

The target group were persons 60 years and older, living in community-based settings, who were enrollees of a managed health care plan serving older adults in an urban Oregon county. Referral was made to the OABCS when hospitalization or transfer to a higher level of care was imminent because of an acute behavioral/ psychiatric crisis. A specialized geriatric mental health team provided evaluation and treatment. In general, treatment was no more than six sessions or eight weeks.

The effectiveness of the OABCS was evaluated for 22 admissions (clients and their caregivers) during a 10 month period. Global assessment of functioning scores (GAF) and Likert-type scales measuring frequency, severity and troublesomeness of target symptoms at admission and discharge to OABCS were used. Clinically significant differences were found for frequency, severity and troublesomeness of symptoms. GAF scores improved significantly ($p < .001$). Only 3 clients required hospitalization for psychiatric reasons.

COMPREHENSIVE GERIATRIC ASSESSMENT EDUCATION FOR COMMUNITY CASE MANAGERS.

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Practicum education in comprehensive geriatric assessment was provided to two home care case managers (CGA-CMs) to enhance their skills in assessing frail older clients, and to enable them to serve as in-house resource persons. Colleagues and family physicians were surveyed to assess their satisfaction with the resource and assessment roles of the CGA-CMs. We also investigated whether the CGA-CMs had improved the assessment skills of their colleagues, using a nonrandomized control group design. Pre-post surveys, including a case study scenario to test assessment knowledge, were administered to case managers (CMs) who did (intervention group, n=7) or did not (control group, n=57) receive ongoing consultation and education (including three in-service sessions) from the two CGA-CMs over a 15-month period. Intervention group CMs reported that interaction with the CGA-CMs had enhanced their skills and benefited their clients, and 10 of 13 family physicians reported improved outcomes for their patients as a result of assessment information received. Intervention group CMs had higher confidence ($p<.05$) in assessing and managing seven of 15 health and social concerns of the elderly, greater use of standard assessment tools (57.1% vs 18.4%, $p=.028$), and higher follow-up case study scores ($p=.029$). Case managers with enhanced training in CGA can have a valuable clinical and educational role in community care.

THE COMMUNITY SAYS YES, THE UNIVERSITY SAYS MAYBE: GERIATRIC COMMUNITY OUTREACH IN A TIME OF CHANGE.

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Participants:

A. Ford (University of Pittsburgh Graduate School of Public Health Center for Minority Health), Lou Mason Assessment.

J. Butler (University of Pittsburgh Graduate School of Public Health) Benedum on Wheels: Summer Assessment.

A. Fox (University of Pittsburgh School of Medicine) Project Development: Benedum on Wheels.

J. Plowman (University of Pittsburgh School of Medicine) The History of Mobile Health Care: A Literature Review.

Discussants:

E. Granieri (University of Pittsburgh School of Medicine, Pittsburgh, PA 15213)

K. Thompson (University of Pittsburgh School of Medicine, Pittsburgh, PA 15213)

Mobile vans for primary care have been implemented for rural areas, however, longitudinal care for senior citizens in urban high rises has not been attempted. At the suggestion of the residents at one Senior High Rise, we proposed a service for older adults in the City of Pittsburgh. Services provided would include primary, longitudinal geriatric care as well as some specialty services, including psychiatry, dental and podiatry. The van would travel to each of the five high rises weekly. We administered a needs survey to determine health care needs of the targeted high rises and the feasibility of such a program. The survey demonstrated that 79% of the residents would utilize at least one of the services offered. Barriers to setting up the program within the community included distrust of the University system, cultural differences, and a language barrier in one high rise. Barriers from within the hospital system included questions about profitability and feasibility.

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Breast Cancer Control as Quality Assurance: Results of a Hospital Based Intervention

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If newly diagnosed post-menopausal women elect breast conserving surgery (BCS), appropriate treatment includes radiation (RAD) and hormonal therapy (TAM). Past research reveals that otherwise healthy women aged 75+ are less likely than women <75 years of age to receive optimal treatment. By bringing hospital tumor registries up to "real" time, we intervened in RI hospitals by giving surgeon specific "performance" reports to service chiefs who distributed them and requested (in 1 hospital) specific explanations for deviations from accepted practices. We analyzed over 4 years of detailed data, on 1144 patients aged 60+, with stage I or II tumors, treated by 78 surgeons in 6 hospitals before and after the interventions, to determine the influence of surgical volume, patient age and exposure to the intervention on the receipt of optimal treatment. We found that 73% of patients received adequate treatment defined as conditional on tumor size and stage. Using hierarchical models we found that surgeons with the lowest volume (45 pts. treated by 20 MDs) treated the oldest patients and were least likely to use BCS. Otherwise, neither volume nor exposure to performance reports was associated with treatment. Unexplained age differences in treatment bias may persist due to a combination of patients' preferences and physicians' attitudes.

DISCHARGE REFERRAL ANALYSIS OF OLDER PATIENTS HOSPITALIZED IN A MEDICAL CENTER OF NOTHERN TAIWAN

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The hospitalization rate of elderly persons is three times of the hospitalization rate of younger persons in Taiwan. In addition, elderly persons are at high risk for poor post-discharge outcomes. Thus, hospitalized elders represent population that requires discharged services. A medical center in Northern Taiwan established a discharge planning program in August, 1996. Until now,1084 patients received the discharge referral services and have been successfully transferred to local hospitals, nursing homes and home nursing agencies. Among them 59.9 percent were people age 65 or older. For this older sample, 41.6percent were females, and 24.2percent of them aged 80 and older. The purpose of this analysis is to investigate the outcomes of referrals made for older patients in this medical center and compare it with the referrals made for younger patients. Findings revealed that33.0percent of the older patients who received discharge services discharged to a local hospital,1.1 percent to nursing homes,13.5percent to elderly homes,17.4percent to a home setting and received home nursing services, and 18.1percent to a home setting without receiving health services. For younger patients who received discharge services, 41.5 percent of them discharge to a local hospital, 0.4percent to nursing homes, 7.5 percent to homes, 13.1percent to a home setting and received home nursing services, and 26.9percent to a home setting without receiving health services. Younger patients is more likely to discharge to local hospitals than older patients.Reasons for referral of older patients were medical problems, problems in self-care ability, economic difficulties, and lack of family resources. Similar reasons for referrals were found for younger patients, except that medical problems appeared to be the main reason for referrals. For emergency room visits within 72 hours after discharge, only 7 cases were found, and most of them (N=5) were older patients. For re-hospitalization' with the same diagnosis within 7 days after discharge, only 6 cases were found, and also most of them (N=5) were older patients. Older patients are at high risk for poor post-discharge outcomes. A subset of convenience sample (N=109) was drawn from this sample to explore the patient satisfaction to referral services and to the care provided in extended care facilities. Higher degree of satisfaction to referral services than extended care facilities was found for both older patients and younger patients. The results of this analysis can contribute to the current knowledge about discharge referrals for older patients in Taiwan and can provide a base for program evaluation and future health policy decisions.

INTERDISCIPLINARY CLINICAL CLERKSHIP IN ASSISTED LIVING AND ELDERCARE

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Assisted living options have emerged as important alternatives to the more traditional institutional settings for eldercare. In order to investigate an interdisciplinary model of health care delivery in the assisted living environment, a 9 month clerkship involving collaboration between Advanced Practice Nursing students and PharmD students was conducted in a 75 bed assisted living facility. Residents identified as high risk for drug related problems and those who experienced a recent fall were referred to the student team for assessment and planning of care. The specific aim of this poster presentation is to present an interdisciplinary model of health care delivery that supports the assisted living environment and can be replicated by other schools of nursing and pharmacy to establish similar programs.

HOSPITAL RN AND MD VIEWS ON USE AND NON-USE OF PHYSICAL RESTRAINTS

K. Lamb, Rush-Presbyterian-St. Luke's Medical Center, 600 S. Paulina, Chicago, IL 60612, L. Mion, Cleveland Clinic Foundation (CCF), Cleveland, OH, C. Merkel, St. Vincent's Medical Center, NY, NY, R. Palmer, CCF.

As part of a three-site cooperative physical restraint reduction program (RRP), 10 clinical focus groups were conducted with 64 RNs and 7 MDs to: determine issues and concerns regarding the use and non-use of physical restraints; identify practice strategies successful in dealing with difficult patient care situations; and identify specific practices or system changes that could be incorporated into the RRP. Themes identified were ICU and non-ICU differences; legal fears; MDs' views that restraints are a nursing practice; and lack of MD education. Decreased nursing staff numbers, increased patient acuity, and shorter lengths of stays were identified as barriers to RRP. Careful evaluation of time and cost of non-restraint strategies is important given these concerns. MDs need to be included in RRP planning and educational strategies.

Impact of Hospital Conversions on Access to Care

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Throughout the U.S., hundreds of community hospitals converted in ownership during the past 15 years; many then merged with other institutions or closed their doors. Hospitals are important institutions in their communities, especially for the elderly. They provide vital, but oftentimes unprofitable, services as well as uncompensated care. Important information about the effect of hospital conversions is limited, especially concerning the effect of these conversions on communities' access to care.

This study's research objective was to assess changes in hospitals' delivery of care subsequent to conversion. Using American Hospital Association Annual Survey data, we identified hospitals that reported a change of ownership between 1980-1990. We investigated indicators of community access to care to determine whether converting hospitals were more likely to reduce the provision of unprofitable services, and whether they were more likely to close.

Our findings provide strong support of the anecdotal reports of weakened service delivery among converting hospitals. Study results are assessed in terms of their implications for the elderly's access to hospital care and the generation of public policies to protect them.

THE GERIATRIC - ORTHOPEDIC INTERDISCIPLINARY TEAM APPROACH TO ACUTE CARE OF HIP FRACTURE PATIENTS.

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Mount Sinai has developed an interdisciplinary "Geri- Ortho" fracture service. This program has treated 400 patients since July 1996. All orthopedic patients who have hip fractures and are over 65 are required to have a geriatric consult. Weekly academic rounds are attended by surgeons, geriatricians, internal medicine, nurse practitioner/coordinator, physiatrist, O.T., P.T., dietary, social work, nursing, physician's assistant. Formal daily bedside rounds are conducted by the geriatrics team. Informal, daily rounds occur between various team members. The result of this program is a change in acute care practices. Individualized care, geriatric dosing medication especially, analgesics and anticoagulation, is the primary method of reducing post operative complications. Comprehensive care is improved by increased communication and collaboration with patients, families and the primary physicians. Upon discharge, a detailed summary of the hospital course, recommendations, medications and contact phone number is provided to answer any questions. The result of this program is a decrease in mortality from 5.1% in 1990-4 to 3.2% in 1997. The length of stay has decreased from 10.45 days in 1996 to 8.19 days in 1997.

FACTORS RELATED TO LOS IN AN ACE MEDICAL UNIT

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Our Medical Unit for the Acute Care of the Elderly (ACE Unit) is an acute care general medical service designed to admit elderly patients and to foster their independent functioning. This experimental Unit (a 20-bed ward, part of a general hospital with 15 specialties) started Sept 1, 1997. The medical staff is composed by a geriatrician medical director, a cardiologist, and two attending physicians.

During the first six months 362 elderly patient have been admitted (females: 65%; mean age: 78.5±7.7). Chief reasons for admission were: change in mental status or other neurologic abnormalities (13%), congestive heart failure, chest pain or other cardiac problems (30%), fever, pneumonia or other infections (15%), acute dyspnea or other pulmonary problems (13%), gastrointestinal bleeding or other gastrointestinal problems, (12%), diabetes mellitus and failure to thrive (17%). Mean length of stay was 7.9 days. Among those reported in literature factors associated to LOS are age, depressive symptoms, comorbidity (number of co-occurent diseases, and burden of diseases), number of drugs, BADL on admission, serum albumin, APACHE II score, and adverse clinical events during the hospitalization. In a multiple regression analysis only number of drugs ($p=0.0001$); adverse clinical events during hospitalization ($p=0.028$), serum albumin ($p=0.0118$) and APACHE II score ($p=0.0161$) remained independently associated with LOS.

In our ACE Unit clinical factors rather than functional or social are independent predictors of LOS.

CHANGE OF FUNCTIONAL STATUS DURING HOSPITALIZATION

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Our experimental Medical Unit for the Acute Care of the Elderly (ACE) is a general medical service designed to admit acute elderly patients and to foster their independent functioning. This 20-bed ward is part of a general hospital with 15 specialties. It started Sept. 1, 1997 and is the first ACE in the area. Patients are admitted directly with common acute medical diagnosis. Besides the usual diagnostic procedures, specific interventions are focused on prepared environment, multidimensional assessment (including a biological frailty evaluation), medical care review, interdisciplinary team rounds. Mean LOS is 7.9 days.

Aim of the study is to evaluate if hospitalization in an ACE Medical Unit is associated to functional loss and the variables associated with this condition. Functional status (Barthel Index) is assessed retrospectively (two weeks before the admission premorbid disability), on admission, and on discharge. Data show that acute events leading to hospitalization are associated to functional loss. However hospitalization does not impair function and patients with a Barthel Index score ranging from 0 to 40 gain function significantly. After controlling for premorbid functional level, factors associated to lack of functional improvement on discharge are dementia (RR=3.5; 95% CI: 1.4-9.8), APACHE (12+)(RR=2.9; 95% CI: 1.1-8.0), serum albumin (<3.5 g/dl) (RR=2.6; 95% CI: 1.1-8.6), and age (80+)(RR=2.0; 95% CI: 1.1-7.1). Data show that in an ACE-Medical Unit clinical severity, rather than hospitalization itself, is associated to loss in function.

GERIATRIC - ORTHOPEDICS AN INTERDISCIPLINARY SERVICE FOR ACUTE CARE MANAGEMENT OF THE HIP FRACTURE PATIENT. A NEED FOR NOW AND THE FUTURE.

E.M. Vespe, M.S.N. Box 1507 Mount Sinai Medical Center One Gustave Levy Place New York, NY. 10029.

Participants:

M.S. Gilbert M.D. (Orthopedics Mount Sinai) Fracture patterns and indications for treatment.

J. Filler C.S.W. (Neurorestorative Care Center Mount Sinai) Psychosocial Assessment that will ensure a Safe, Cost Effective Smooth discharge post Hip Fracture Surgery.

A. Blaustein R.D. (Neurorestorative Care Center Mount Sinai) Optimization of Nutritional Status of Geriatric Hip Fracture Patients During Acute Hospitalization.

D. Fichandler M.S., P.T. (Neurorestorative Care Center Mount Sinai) Acute Rehabilitation of the Geriatric Patient after Hip Fracture Surgery in an Interdisciplinary Setting.

E. M. Vespe M.S.N. (Geriatrics & Orthopedics Mount Sinai) The Benefits of Having a Clinical Coordinator on Your Geriatric-Orthopedic Team.

Discussants:

E. Strauss M.D. (Orthopedics Mount Sinai) Orthopedic - Geriatric Patients Complexities of Care

J. Kessler D.O. (Geriatrics Mount Sinai) The Geriatric-Orthopedic Fracture Service- An Over View from the Geriatric Perspective.

With 250,000 hip fractures occuring annually, at a cost of 8 billion dollars per year and estimates of 500,000 hip fractures annually in the next 30 years, it is imperative that health care providers maximize patient care in the acute setting. Geriatric - Orthopedics will become a leading speciality in the future that will require true collaboration of all disciplines.

Although a new program, the Mount Sinai Geriatric - orthopedic interdisciplinary team has observed a decline in hip fracture mortality from 5.1% in 1990-4 to 3.5% in 1997. A decrease in length of stay from 10.45 days in 1996 to 8.19 days in 1997 has occured.

Could this new dynamic approach to the care of the older hip fracture patient be helpful at your facility?

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CORRELATES OF RECENT MAMMOGRAPHY SCREENING AMONG OLDER WOMEN: HEALTHCARE, LIFESTYLE, AND DEMOGRAPHIC FACTORS

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Although mammography has been a Medicare benefit since 1991, women aged 65 and older are less likely to utilize mammography screening than younger women despite having a higher risk of breast cancer incidence and mortality. We examined factors associated with mammography within the past year among 27,191 white women aged 65 to 75, who participated in the Cancer Prevention Study-II Nutrition Survey during 1992-1993. Overall, 61.5% reported having had a mammogram within the past year. Women who reported having had a mammogram within the past year were more likely to have at least two chronic diseases (vs none: OR=1.6, 95% CI=1.5, 1.8), have had a recent pap smear (within ≤3 years vs 3+ years: OR=4.88, 95% CI=4.58, 5.20), be current hormone replacement therapy users (vs never users: OR=2.56, 95% CI=2.38, 2.75), have a family history of breast cancer (mother or sister vs neither: OR=1.24, 95% CI=1.15, 1.34), have at least a college education (vs less than high school: OR=1.78, 95% CI=1.59, 1.98), and be never smokers (vs current smokers OR=1.26, 95% CI=1.14,1.37). Mammography screening programs should target older women with limited access to primary care and less formal education.

UNDERUTILIZATION OF LIPID-LOWERING DRUGS IN OLDER PERSONS WITH MYOCARDIAL INFARCTION

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A prospective study of 500 consecutive patients (pts) with Q-wave myocardial infarction (MI) admitted to a nursing home investigated the prevalence of use of a lipid-lowering drug (LLD) at the time of admission in pts with a serum low-density lipoprotein (LDL) cholesterol >125 mg/dl. The 500 pts included 317 women and 183 men, mean age 81±8 years (range 60 to 100). Of 500 pts, 335 (67%) had a fasting serum LDL cholesterol >125 mg/dl measured the day after admission. Of 335 pts with MI and a serum LDL cholesterol >125 mg/dl, 17 pts (5%) were receiving a LLD at the time of admission. The prevalence of use of a LLD was 7% (11 of 153 pts) in pts 60 to 80 years of age and 3% (6 of 182 pts) in pts 81 to 100 years of age with a serum LDL cholesterol >125 mg/dl. A LLD was used in 3 of 165 persons (2%) with a serum LDL cholesterol ≤125 mg/dl. Of 43 persons with MI and a serum LDL cholesterol >125 mg/dl who underwent coronary revascularization, 3 pts (7%) were on a LLD. These data indicate marked underutilization of a LLD in treating older pts with MI and hyperlipidemia.

STROKE INCIDENCE AND CASE FATALITY TRENDS IN A DEFINED ELDERLY POPULATION 1980-1992

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This study is a continuation of research which documented a sharp decline in stroke case fatality rate in a large well defined elderly population between 1965-1980. The purpose is to assess stroke incidence and case fatality rates in this population between 1980-1992 when there was a leveling off of stroke mortality decline in the U.S. The study is based upon all first ever (incident) strokes, confirmed using WHO criteria, occurring among persons ≥65 years old enrolled in a large health plan with access to complete inpatient and outpatient records for research purposes. During 274,907 person-years (py) of observation there were an estimated 2379 incident strokes, 15% of which were diagnoses and managed as outpatients. Incidence remained constant in four 5-year time intervals between 1967-1992, with age adjusted rates of 867, 933, 849, and 857 strokes per 100,000 py. Thirty-day case fatality rate declined dramatically between 1965-1980, from 33% to 23%, but remained unchanged between 1980 and 1991. Hemorrhage diagnosed by CT scan accounted for 11% and 9% of strokes in early and late 1980s, respectively. In this elderly population, the leveling of stroke mortality decline in the early 1990s is associated with no change in stroke incidence, case fatality rate, or frequency of intercerebral hemorrhage.

ACUTE HOSPITALIZATION IN PACE: RATES, CONCOMITANTS, AND PREDICTORS.

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The Program for All-Inclusive Care for the Elderly [PACE] replicates the community-based, comprehensive care model pioneered at OnLok. PACE admits frail elderly people meeting state criteria for nursing-home care, and employs health care teams to deliver care in appropriate settings, aiming to optimize health and prevent institutionalization. Using Data-PACE records, we evaluated acute hospitalization, its predictors, and discharge diagnoses in 6,592 PACE participants admitted before and followed through March, 1997. Hospitalization risk and bed-day utilization varies considerably across PACE sites. However, hospital days per 1000 PACE participants/year are low and trending lower, at 2,392 & 1983 (PACE, 1995 & 1996) vs. 2,571 for Medicare enrollees in general (1995). Median time to first hospitalization in PACE was about 2 years, 1 mo. (773 days; 95% c.i., 726,814). Possible reasons for variability among sites are discussed, and a site-controlled Cox regression model of participant-level predictors of hospital entry is presented. Finally, the relationship between hospitalization and mortality in PACE is explored.

FUNCTIONAL TRANSITIONS AND ACTIVE LIFE EXPECTANCY AMONG OLDER JAPANESE

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We examined functional transitions in physical activities of daily living (PADL) and instrumental activities of daily living (IADL) in one year among older Japanese living in a rural district and calculated active life expectancy. A total of 10,316 older people were asked to participate in this study in July 1989 and 1990. Five items of PADL, including bathing, dressing, using the toilets, standing, and eating, and five items of IADL, including using public transportation, using telephone, shopping for daily necessities, preparing meals, paying bills, and managing deposits, were measured on each survey. We defined "functionally dependent" as a loss of independence in any item of PADL or IADL. In addition, we defined physically active life expectancy (PALE) and instrumentally active life expectancy (IALE) as the average number of remaining years of life free from PADL and IADL dependence at a given age, respectively. Over 90% of those who were initially independent at the baseline survey remained the same at the baseline survey. On the other hand, one sixth of subjects who were initially dependent became independent one year later. Using increment-decrement life table techniques, we calculated PALE and IALE. PALE for male and female were 16.8 and 18.7 years at age 65, respectively. IALE for male and female were 12.3 and 13.6 at age 65, respectively. Whereas the proportion of PALE to total life expectancy (TLE) for male was almost the same as that of female, the proportion of IALE to TLE for male was larger than that for female.

HEALTH CARE COSTS FOLLOWING 11 TYPES OF INCIDENT FRACTURES AMONG AGED MEDICARE BENEFICIARIES

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The growing number of older persons at risk for fractures presents a public health problem with significant economic consequences. To estimate health care costs associated with fracture, we conducted a case-control study using Medicare claims data for a 5% sample of beneficiaries with fracture during the period July 1, 1991 through June 30, 1992 and their controls matched by age, sex, race, and state and county of residence. We estimated costs at the individual beneficiary level and for the total Medicare population for 11 types of incident fractures during the year post-fracture. Hip and wrist fractures had the highest and lowest mean daily cost per beneficiary respectively. Total excess costs to the health care system for all fractures examined amounted to $5.2 billion, of which the Medicare program paid $4 billion. These findings provide information for assessing the potential cost savings from fracture prevention in the elderly.

PREVENTABILITY OF EARLY EMERGENCY HOSPITAL READMISSION IN ELDERLY PATIENTS IN HONG KONG

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Early emergency readmissions are common among the elderly patient. Risk factors for readmissions have not been studied locally. The purpose of the present study are to study the risk factors and preventability of early emergency readmission (within 28 days) in the elderly medical patients in Hong Kong. From March to Nov. 96, 380 elderly medical patients with emergency hospital readmission (within 28 days) and 380 controls matched for sex and age were studied in Queen Mary Hospital. Thirty-one potential risk factors which include demographic, socio-economic conditions, living arrangement, co-morbid medical diagnoses, physical functional status, and mental status were assessed in all cases and controls. Preventability was based on the presence of risk factors for the readmission as well as the patient's health and social needs including institutional placement. Impairment in activities of daily living, number of medical diagnoses, adverse drug reaction, advanced malignancy, congestive heart failure, chronic obstructive airways disease, dysphagia, end-stage renal failure and no income were significant risk factors for early emergency readmissions. Prevention was potentially possible in 59.5% of cases. Adequate long-term care provision, discharge planning and optimisation of medical management were three groups of probable preventive measures. Future studies can provide service programs targeting at these factors.

EVALUATING TELEMEDICINE APPLICATIONS CONNECTING AN ACUTE AND LONG TERM CARE SETTING

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The goals of this study are to implement and evaluate telemedicine applications between the Iowa City Veterans Administration Medical Center (ICVAMC) and the Iowa Veterans Home (IVH), including: 1) Triage of IVH patients by primary care staff in the Urgent Care Clinic of the ICVAMC; 2) Interim follow-up evaluation of selected patients with selected problems in specialty clinics (eg; diabetes, depressions, urologic disorders); and 3) Skin Ulcer Care Nursing Consultation. Using a prospective design with historical controls, current practice will be compared to use of telemedicine. The outcome of the consultation (admission, another clinic appointment, and change in treatment), length of the consult, equipment used and qualifications of the health care provider at the consult will be used to analyze costs. Specific outcome data to be collected are number of hospital admissions resulting from each encounter, number of patient-related trips between the IVH and ICVAMC, and patient and provider satisfaction. Equipment is installed at the project sites and data collection in is progress. Preliminary data demonstrate high satisfaction by both the resident and staff in the long term care setting and the consulting clinician in the acute care setting with the telemedicine encounter. [VA HSR&D Dev 97-012]

ETHNIC DIFFERENCES IN WALKING TIME

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Purpose: Self-report measures suggest that Mexican Americans (M) may have more functional limitations than European American (E) elders. Little performance based data is available that directly compares functional limitations between these two ethnic groups. The purpose of these analyses was to assess walking time differences between M and E elders. **Methods:** Subjects were 679 M and E community dwelling elders (ages 65-79) enrolled in the San Antonio Longitudinal Study of Aging. Two 50 foot walks were timed, averaged, and the distribution divided into deciles (higher deciles=slower times). Hip and knee range of motion (ROM) were measured in degrees for both sides, averaged, and divided into ten degree intervals. **Results:** The table shows the results for a forward stepwise multivariable regression with deciles of 50 ft walk time as the dependent variable. The incremental R^2 for each variable as it entered the model is displayed in the last column: E elders traverse 50 feet nearly 2 seconds faster than M elders. Taller persons and those with better ROM walk faster.

Variable	*Coeff*	*95% CI*	*Incr R^2*
Age (year)	0.15	(0.10, 0.21)	2.4%
Gender (0=M, 1=F)	0.47	(-0.10, 1.05)	3.5%
Eth. Group (0=E, 1=M)	**0.67**	**(0.23, 1.12)**	**7.3%**
Height (cm)	-0.09	(-0.13, -0.06)	4.6%
Weight (kg)	0.01	(-0.01, 0.02)	3.6%
Hip ROM (10 deg)	-0.34	(-0.48, -0.20)	3.9%
Knee ROM (10 deg)	-0.32	(-0.50, -0.14)	1.2%

Conclusions: These data suggest that M may have more functional limitations in walking than E elders. However, ethnic group specific criteria may need to be applied to interpretations of timed performance-based measures of function.

JOB SATISFACTION AMONG NURSING ASSISTANTS IN NURSING HOMES AND PACE.

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Nursing homes traditionally experience high turnover rates of nursing assistants (NAs), who provide the majority of direct patient care. The Program of All-Inclusive Care for the Elderly (PACE) model incorporates many elements that may increase job satisfaction for NAs. We conducted a cross-sectional study of 5 PACE sites and their neighboring nursing homes to investigate job satisfaction. NAs at each site were given a 1-hour survey assessing demographics, job description, previous experience with elderly individuals, job satisfaction, and the Myers-Briggs Type Indicator. 213 NAs in nursing homes, and 138 NAs in PACE participated. The mean score on the Minnesota Satisfaction Scale for NAs in PACE was 3.53, vs. 3.29 in nursing homes (on a 1 to 5 scale, 5 being highest, p=0.001). There was a significantly higher rate of perceived respect for suggestions (64.9% vs. 48.8%, p=0.004), chance to form close relationships with patients (86.4% vs. 75.8%, p=0.02), and job variety (73.8% vs. 56.8%, p=0.002) in PACE vs. nursing homes. The mean job satisfaction is higher in PACE programs than in neighboring nursing homes, and higher than previously published rates for nursing homes, according to the Minnesota Satisfaction Scale. Incorporation of some of the elements of the PACE model may lead to increased job satisfaction for NAs in other job settings.

AUTOPSY AND AGING: DECLINE OF THE "GOLD STANDARD" OF QUALITY

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Over the past seven decades, hospital autopsy rates grew rapidly and then precipitously declined. This paper reports findings from the Institute's annual study of metropolitan Chicago autopsy rates; the reasons for the major decline in autopsies; and the significance of this decline for the aging population. Chicago area autopsy rates were 11% in 1920; peaked at 49% in 1955; and declined steadily to 14% in 1985. Rates have continued to decline slowly since 1985 to an average hospital rate of 11% in 1995. Substantial variation exists, in 1995, among hospital rates from 1% to 33.6%. Hospitals with at least one medical residency training program had an average autopsy rate three times higher than those with no residency programs. A survey of hospital pathologists in 1994 and 1995 identified the major reasons for continuing autopsy decline: the use of other technologies to obtain the same information; lack of a specific JCAHO requirement; fear of malpractice; and lack of specific reimbursement for autopsies. Over 70% of respondents believed that managed care would further decrease the autopsy rate. Although elderly comprise the majority of most current hospital populations, they were identified as the least likely group to have autopsies. This has serious implications for understanding the effects in the elderly of certain treatments; the progression of disease and chronic conditions, and identification of differences within the elderly population among regional areas and among racial and ethnic groups.

SELF-REPORTED CONSTITUTIONAL SYMPTOMS AND UTILIZATION AMONG OLDER ADULTS.

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Self-reported constitutional symptoms influence use of health services to an unknown extent. Purpose: To identify associations between constitutional complaints, including depression or anxiety, and future health care utilization among older adults. Methods: 447 ambulatory, community-dwelling older adults (mean age 74 years; 21% non-white; 44 % female; self-rated mobility excellent in 14%, fair/poor in 24%) were asked about 18 conditions during enrollment in a prospective observational study. Medical diagnoses (e.g. heart failure) were included; three items were classified into a General Domain: depression/anxiety (DEP), sleep problems, and chronic pain. Subjects rated any functional limitations (FL) for these diagnoses. Hospitalizations, emergency room (ER) use, and Total Utilization (any death, nursing home admit, hospitalization, or ER use) were tracked over one year. Results: 55% of subjects with a positive General Domain reported DEP with FL. Relative risks (95% CI) for utilization are shown.

	Total Utiliz.	Hospitaliz.	ER use
General Domain	1.95 (1.16, 3.26)	1.79 (0.98, 3.26)	2.84 (1.66, 4.84)
Depression/ anxiety	1.61 (0.83, 3.14)	1.47 (0.67, 3.24)	2.73 (1.39, 5.36)

Logistic modeling found no dominant General Domain item for prediction of Total Utilization, but an explanatory effect remained for DEP in predicting ER use (OR 2.26; 1.11-4.54). Conclusion: Patient-perceived limitations due to constitutional complaints or depression/anxiety may be associated with increased utilization, particularly of emergency room services, among older adults.

DENTAL HEALTH IN SWEDEN BETWEEN 1968-91. IMPLICATIONS FOR ELDERLY PEOPLE.

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Between 1968 and 1991 edentulousness and partial edentulousness decreased from 38% to 13% of the population aged 18-75. The proportion of persons with teeth with many fillings, crowns or bridges increased from 30% to 45%. The proportion of persons with teeth in good condition with few or no fillings increased from 32% to 42%. Age groups above 50 had the largest reduction in edentulousness and partial edentulousness, around 40 percentage points. Edentulousness and partial edentulousness among 60-64 years olds in 1968 was equal to that of 80-84 years olds in 1992. Among those aged above 50, the proportion of persons who had teeth with many fillings, crowns or bridges increased by about 30 percentage points in the period 1968-91. These improvements has led to increased need for dental care among the elderly in particular. If the present general Swedish dental health insurance scheme is abandoned, which is being discussed, there is a risk that the effects will be felt most strongly among those age groups which have benefited most from the scheme, that is, elderly people. Analysis was based on nationally representative samples (n=5000) of the population aged 18-75 interviewed in 1968, 1974, 1981, and 1991. A 1992 survey also interviewed those aged 76+.

LOGISTIC AND CART MODELING OF DECLINE IN FUNCTIONAL STATUS

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The importance of initial functional status (FS) in predicting future FS has been clearly demonstrated in the literature. However, there is little consensus on how to use activities of daily living (ADLs), categorically or continuously, in modeling FS. This study compares several approaches to using initial FS to model decline in FS.
Our sample consists of 16,998 residents who resided in VA long-term care facilities for any time from 4/1/96 (or later) up to 10/1/96. The Patient Assessment File (PAF) was used to evaluate the changes in residents' FS. Baseline FS was measured using 3 ADLs: eating, transferring, and toileting (each rated on a 1-5 scale). Decline in FS was defined as an increase (worsening) of two or more in the summed score (ADLSUM) of eating, transferring, and toileting between baseline and semi-annual assessments. Patient characteristics related to decline (e.g., age, medical conditions, and length of stay) were used as risk factors, along with baseline ADLs, to predict decline in FS. Logistic regression models were developed using each of the 3 ADLs as well as ADLSUM and an additional ADL, mobility.. Variables were modeled both continously and categorically. We also developed a classification tree (using CART) based on ADLSUM and each of these 4 ADLs. The regression R^2s ranged from 0.042 to 0.059, while the c-statistics ranged from 0.66 to 0.69. The model that used categorical groupings from CART produced the highest R^2 and c-statistic. We found that decline in FS was not linearly associated with baseline ADLs. Therefore, models that use ADLs categorically or those that use ADLSUM quadratically may be more appropriate in predicting future FS. Variation in model performance indicates that caution must be taken to capture the complexity of the relationship between initial FS and decline in FS.

Patient Outcomes in a Geriatric Unit in a Rehabilitation Hospital.

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Designated geriatric units (GUs) in rehabilitation hospitals are rare: in a random survey of 48 rehabilitation hospitals, only 2 had a GU. Utilizing a geriatric interdisciplinary team, our institution set up a GU to care for elderly patients with cognitive impairment and acute medical and rehabilitation needs. Because of the scarcity of similar units, it is unclear how to assess the effectiveness of the GU. As an initial step in designing a study to assess GU patient outcomes, we conducted a retrospective medical record review of patients discharged from this 14 bed unit between April and June '97.

Variables studied include age, gender, admission source, length of stay, and discharge setting. 32 patients were discharged form the GU during the study period; 5 patients had 2 or more discharges, for 38 total discharges. Average age was 80 years; 56 % were female. 9 admissions were directly from home, 29 were transfers from acute hospitals. Average length of stay was 34 days. 17 discharges were to home, 12 were to nursing homes, 7 were to acute or other hospitals and 1 patient expired.

We compared these 32 GU patients with 92 patients in other rehabilitation programs at the same institution during the same 3 month period. GU patients were older (80 vs. 73 years $p<0.0001$), and had longer lengths of stay (34 vs. 26 days, $p<0.044$). They were more likely to be transferred to an acute hospital (18% vs. 8%, $p\leq0.03$) and less likely to be discharged to home (45% vs. 76 %, $p<0.0006$).

Preliminary results suggest that GU patients differ significantly from general rehabilitation patients. Ongoing research addresses whether standard tools, (such as the Functional Independence Measure) used for monitoring outcomes in general rehabilitation patients, can reliably evaluate clinical benefits of hospital level rehabilitation in an elderly, cognitively impaired population.

MEDICARE REIMBURSEMENT FOR ADVANCED PRACTICE NURSES: THE 1997 BALANCED BUDGET ACT

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Advanced practice nurses (APN), including nurse practitioners and clinical nurse specialists, have been integral to health care services for older adults for more than twenty years. Piecemeal reimbursement from Medicare and other payers has impeded full utilization of APN services in collaborative practices and interdisciplinary teams in primary, acute, and long term care arenas. Nurse practitioners have been reimbursed by Medicare since 1990 for services provided in skilled nursing facilities or rural-designated areas. Medicare claims data for 1996 indicate that, for all services provided, skilled nursing facility visits were the most common services reimbursed to nurse practitioners. However, these services represent less than 1% of all provider claims. The Balanced Budget Act of 1997, granting direct reimbursement to nurse practitioners and clinical nurse specialists in all geographic settings, greatly enhances opportunities to utilize advanced practice nurses in any setting providing care to older adults. In this paper, we will discuss the legislative and policy changes implemented by The Balanced Budget Act of 1997 regarding Medicare reimbursement of nurse practitioners and clinical nurse specialists. Implications for utilization of advanced practice nurses in integrated delivery systems, interdisciplinary teams, nurse-managed centers, and provider practice groups will be presented.

PREDICTORS OF UNCERTAINTY IN MEDICAL DECISION WITH OLDER PATIENTS.

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Physicians' diagnoses necessarily involve some degree of uncertainty and affects their medical decision making. This study is a controlled factorial experiment to examine what factors predict uncertainty in diagnostic decisions. The physicians individually viewed two video scenarios in which the actor-patients presented with depression or Polymyalgia Rheumatica. Physicians were asked to diagnose the patients and assign probabilities of diagnosis. The level of uncertainty was assessed by probability of diagnoses. The predictors are physicians' years of practice, demographic characteristics, attitudes, and proportions of patients covered by Medicaid and managed care contracts. The results showed that male physicians and those with more years of practice had lower level of uncertainty than female physicians and those with fewer years of practice. The level of uncertainty decreased when the percentage of patients under managed cares contracts increased, but not with caseload covered by Medicaid. Consequently, when uncertainty increased, physicians tended to diagnose more serious medical conditions. Physicians' practice attitudes were not important predictors of uncertainty.

Physical activity, well being and longevity.

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The benefits of regular exercise on health are well accepted. It is also widely recognized that in middle-aged men low-intensity physical activity is associated with reduced mortality, but evidence of this association in the elderly is less solid. The Jerusalem 70-Year-Olds Longitudinal Study, follows a systematically selected and representative sample of all residents of the western part of the city born in 1920-1. An extensive social and medical profile of the 456 subjects, 25% of the total population, was developed at age seventy by extensive interview and physical and ancillary examination. Medical diagnoses were established and subjects reported their level of regular physical activity. Unadjusted mortality at six year follow up was significantly greater for subjects reporting no regular exercise than for those walking as little as four hours weekly (23.4% vs. 9.9%, OR=2.77, 95% CI 6.4-4.69). The significance of these benefits was demonstrated for males as well as for females (30.28% vs. 12.14% $p<0.001$, 16.19% vs. 6.86% $p=0.036$ respectively). Increased regularity of activity correlated with declining mortality. Walking at least an hour daily was significantly more protective than walking four hours weekly ($p=0.037$) and even than sporting activity at least twice weekly ($p=0.055$). Logistic regression analysis demonstrated the survival advantage for all levels of consistent, moderate physical activity to be independent of gender, smoking, subjective economic hardships or pre-existing medical conditions (HTN, diabetes, coronary artery, cerebrovascular, renal and respiratory disease, anemia and malignancy), OR=2.20, 95% CI 1.21-4.02. These results agree with those of the Honolulu Heart Program and the British Regional Heart Study and suggest even more forcefully that low level physical activity confers increased survival in the aged. We propose that elderly people should be encouraged to engage in regular low-level physical activity by primary care as well as by national and public health organizations.

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THE COLLABORATIVE RESEARCH PROGRAM - LONG TERM CARE (CRP-LTC)

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The purpose of this presentation is to describe an innovative and collaborative approach to nursing research regarding care of persons in long term care facilities. Baycrest Centre for Geriatric Care, Rehabilitation Institute of Toronto, Sunnybrook Health Science Centre, and the Faculty of Nursing, University of Toronto initiated a collaborative research program in May 1995. The purpose of this program is to develop programs of research across organizations in order to build and apply knowledge about the experiences and care of persons residing in long term care facilities. Programs of research which have been initiated are a) Quality of Life from the Residents' Perspective, b) Living with Cognitive Impairment, c) Freedom and Mobility, and d) Caring/ Relating: Resident and Family Focused Care. Within these programs 11 studies are underway. The presentation will describe how the program was initiated, the commitment of the participating organizations, and the processes of involvement across the four organizations. The mission, goals, the structure of the program, and the progress of the CRP-LTC to date will also be presented. The anticipated outcome of this program is to build knowledge base about the experiences and care of older adults residing in long term care. Unanticipated outcomes of collaboration across agencies relevant in today's health care contexts will also be discussed.

THE IMPORTANCE OF FRIENDS AND FAMILY TO RURAL ELDER'S DECISION TO STOP DRIVING.

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The support of family and friends plays a key role in the decision to stop driving by urban elders. Similar information is not available regarding rural elders. A convenience sample of 60 rural elders, 60 of their self-identified best friends, and 87 self-selected family members participated in this qualitative study to determine the influence of friends and family on the older rural adult's decision to stop driving. Data were collected with semi-structured interviews and a rating scale. Analysis of the transcribed interview data was accomplished using conceptual coding and the constant comparative method. Data from the rating scale were quantified with descriptive statistics. Six categories were identified from the interview data with older drivers: trust, support, acceptance, anger, sorrow, and loneliness. Three categories emerged from the interview data with friends and family: worry, tension and discomfort, and relief and responsibility. Seventy percent of the older drivers indicated that friends and family had played an "important" or "very important" role in their decision to stop driving. Nurses working with older rural adults must recognize that the decision to stop driving is an emotional and difficult one. For many older drivers, the support of friends and family is essential to making that decision.

SELF-CARE PRACTICES OF MEDICATION MANAGEMENT IN CULTURALLY DIVERSE OLDER PERSONS

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Older persons consume disproportionate amounts of prescription, over-the-counter, and herbal remedies. While there is evidence to suggest that pharmacotherapies in many situations contribute to improved functional status and quality of life for those with chronic illness(es), little attention has been paid specifically to the challenges polypharmacy in older persons poses to health care professionals and to optimal strategies for maximizing effective self-care in medication management.

This study was undertaken to explore self-care practices in medication management among four community-residing ethnic elder groups: African Americans, Asian Americans, Latinos, and Caucasians. Using triangulation methodologies that integrate qualitative and quantitative inquiry including survey questionnaires, focus group interviews, and observation, common themes and variations surrounding the nature of self-care practices in medication management among the four ethnic groups and the entire sample were identified.

The results have led to the development of a culturally appropriate, ethnically specific outcome-based intervention strategy designed to enhance self-care capacity in medication management, promote functional independence, and minimize disabilities associated with multiple medication use in culturally diverse older adults.

RECALLED IMPACT GRIEF AND CURRENT GRIEF OF SPOUSE CAREGIVERS OF DEMENTIA PATIENTS.

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Caring for a spouse with dementia means living with loss over an extended period of time. The grief spouse caregivers experience as their partner loses mental capacities and function is just beginning to be understood. Previous study by this author of grief in caregivers indicates that the emotional distress at the impact of the illness diagnosis filters throughout the caregiving years. The purpose of this study was to compare caregivers perceptions of their grief at impact and the relationship of such perceptions to the grief they were currently experiencing. The sample was 11 caregiving spouses of dementia patients. Grief was measured on the Grief Experience Inventory (Saunders & Mauger, 1985). At Time 1 subjects related the grief they experienced at diagnosis. At Time2, 2 months later, subjects related the grief they were currently experiencing. Findings in progress indicate the grief continues in intensity in the illness experience in areas such as despair, anger and hostility, and rumination. Recollections of grief at impact of the loss does seem carry through to perceptions of current grief.

DIFFERENT PATTERNS OF CAREGIVING PROCESSES WHEN FAMILY CAREGIVERS OF FRAIL ELDERS FACING COMPETING NEEDS

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Family caregivers often face competing needs while providing care to their family members. The purpose of this study was to explore the patterns of caregiving processes used by family caregivers of frail elders when they face competing needs. Two samples were included in this investigation with one consisted of 8 families of frail elders receiving home nursing care, and the other consisted of 14 families of frail elders who just discharged from a teaching hospital. Face-to-face in-depth interviews with frail elders and their family caregivers were used to collect the data. Interview data were subjected to constant comparative analysis (Glaser & Strauss, 1967). "Finding a balance point" was emerged as the core category. "Finding a balance point" is used by caregivers to achieve or preserve interactive equilibrium in caregiving. Three different types of caregiving processes of "finding a balance point" were identified. "Maintaining the balance point" occurred when strategies were used to prevent a major problematic situation. "Regaining the balance point" took place in situation in which a major problematic situation had already happened and strategies were used to restore a more satisfactory situation. "Establishing the balance point" occurred for caregivers who are just beginning to provide care for another family member. Several balancing strategies including managing behavior/emotion problems, modifying environment, altering the schedule/activities, constructing the work team, running the work team, innovating care task, engaging self-care activities and managing treatments were used in the process of "finding a balance point". Altering the schedule/activities and running the work team were used often in "maintaining the balance point". Constructing the work team was used often in "regaining the balance point" and "establishing the balance point". Factors influencing these caregiving processes were caregiving resources, caregiving task difficulties, caregiver's self-expectations and caregiver's knowledge about care receiver. The findings of this study might increase the sensitivities of health care providers to a wider variety of family's conditions and actions. Interventions can be developed to increase caregiver's resources, decrease caregiving task difficulty, promote caregiver's realistic self-expectations, and enrich cargiver's knowledge about care receiver in order to facilitate the processes of "finding a balance point" between competing needs.

Blood Pressure Responses to Anger, Anxiety, and Sadness in Black Female Caregivers and Noncaregivers. S. Picot, J. Zauszniewski, S. Debanne, H. Lee, L. Holland, N. Mirpourian, Case Western Reserve University, Cleveland, OH. 44106. Hypertension has an earlier and more severe onset among black females than white females. Yet, mood symptoms associated with depression have been studied in relation to BP in white female caregivers, not Blacks. Neuman systems model provided the framework for examining the influence of caregiver moods on blood pressure response. The purpose of this study was to examine the correlation of anger, anxiety, and sadness to hourly ambulatory BPs in a random sample of 37 black female caregivers (BFCs) and a comparison group of 38 black female noncaregivers (BFNCs). Data were collected through subject completion of visual analogues measuring each mood following each ambulatory BP. After determining comparability on hypertension risk factors, univariate statistics were conducted to assess group differences on moods and BP and multiple regressions, to assess the correlation of moods to BP. The groups were comparable on all hypertension risk factors except alcohol ($X^2 = 4.43$, $p < .05$); BFNCs drank more. BFCs recorded higher levels of anger ($t = -1.87$, $p \leq .10$)) and comparable levels of anxiety and sadness. Among caregivers only, anger was negatively correlated with both systolic ($R^2 = .17$, $p \leq .01$) and diastolic BP ($R^2 = .19$, $p \leq .01$). Though the other moods were not correlated with BP of either group, BFCs recorded higher levels. These findings suggest that among BFCs, mood symptoms penetrated the lines of resistance to influence BP control. In such cases, nurses may intervene with primary prevention by strengthening the BFC's existing strengths and ability to remain stable. Also, nurses may implement secondary prevention to teach BFCs to safely express anger and minimize risks for HBP. Funded by grants to Dr. Picot from NINR grant #NR0429 and The Cleveland Foundation Grant #97-0468.

CONTENT AND STABILITY OF A STRUCTURED COMMUNICATION INTERVENTION FOR DEMENTIA.

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Documentation of theory-driven, empirically-tested nursing interventions for dementia is rare. Evaluating stability is a critical step in creating robust and replicable clinical interventions. The purposes of this analysis were to describe content, form, and structure and to evaluate stability of a communication intervention (CI) with severely demented nursing home residents. This intervention was conducted to assess the impact of nurse-resident communication on the pattern and rhythm of wandering behavior. The CI was applied within a multiple case study (N = 4) embedded time-series design. Content was measured using Six-Category Intervention Analysis (Heron, 1976). Form was measured using eight core behaviors in two dimensions: verbal and non-verbal. Structure was quantified using rhythm theory. Three parameters of stability in the use of the CI were evaluated: within case; across cases; and over time. Results indicate that the intervention was highly stable in both content and form, despite statistically significant differences in the structure of communication behavior of cases. Thus it is feasible to conduct a highly stable communication intervention with severely impaired residents in a natural environment.

CONGRUENCE OF PAIN REPORTS BETWEEN NURSING HOME RESIDENTS AND THEIR FORMAL CAREGIVERS

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Pain in nursing home residents is a significant problem with an estimated 70% of residents experiencing some type of pain. The effective management of pain depends on caregivers' ability to accurately assess pain in those for whom they provide care. Thus, the purpose of this study was to investigate (1) the prevalence, type, and severity of pain in nursing home residents, and (2) congruence between residents' pain reports and those of their paid caregivers [e.g., nursing assistants (NAs) and Registered Nurses (RNs)]. This study was conducted in a sample of 39 nursing home residents from one midwest nursing home. Mean age of the residents was 85 years (Range = 62-99); 82% of the sample were female. More than half (41%) of the residents were diagnosed with either dementia or Alzheimer's Disease and 21% had diagnosed depression. Residents' self-reported pain over the past week was obtained in an interview. NAs rated the presence, location, and severity of pain in residents under their direct care over the same period. RN ratings of pain were obtained from the Minimum Data Set (MDS). The results indicated that 46.2% of the residents reported pain within the last week, with a mean pain severity of 1.0 (Range = 0-5) on a 1-10 scale. The most frequent sites of self-reported pain were back (21%), knee (18%), and stomach (18%). NAs reported that 18% of the residents had pain in the last week. RNs reported that 51% of the residents had pain. No significant relationships were found between residents' self-reports of pain and ratings by either NAs or RNs. These findings suggest that NAs may lack necessary pain assessment skills. In contrast, RNs overestimated pain, suggesting that they utilized more than verbal self-reports during pain assessment. Discussion will focus on strategies for improving pain assessment skills among nursing home caregivers.

PAIN AS A PREDICTOR OF LATE LIFE DEPRESSION

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Physical pain has numerous consequences for the physical functioning, activities, and well-being of individuals who suffer from it. Pain and depression have been consistently linked in the literature, and longitudinal studies have suggested that it is the experience of living with pain that leads to depressed affect. The purpose of this study is to examine the relationship between pain and depression in community-dwelling elders. Data for this study are drawn from the pilot study of the Advanced Cognitive Training for Independent and Vital Elders [ACTIVE] study, a multisite clinical trial in community-dwelling elders. Participants for this substudy were 168 elders with a mean age of 74 (Range = 65-90). Eighty-three percent of the sample were female. Pain was assessed two ways; (1) a list of pain sites reported as limiting activity, and (2) the Bodily Pain subscale of the SF-36 that reflects pain severity and interference with activities. Depression was measured using the CES-D scale. The results indicate that 34% of the participants reported pain in at least one body site. Pain was significantly correlated with depression, both in terms of the number of pain sites (r= 0.24, p < .01) and the SF-36 pain scale (r= -0.26, p < .001). Higher numbers of reported painful sites and more severe and limiting pain is associated with higher levels of depression. In hierarchical regression analyses, pain was a significant predictor of depression, even after controlling for covariates such as mobility, cognition, age, gender, health, and vision. Additional analyses will focus on differential prediction of pain based on specific pain sites. These findings suggest that the relationship between pain and depression is robust. Implications for management of pain and depression will be discussed.

WOMEN IN THE WORKFORCE AFTER AGE 65

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This study examined physical health and employment status in women with ages ranging from 65 - 98. A descriptive design with three age cohorts (n =30) was used to study 94 African-American and Caucasian women with no cognitive impairment as measured by the preliminary questionnaire of the Older American Resources and Services Multidimensional Functional Assessment Questionnaire (OMFAQ). Face to face interviews using the economic resource and the physical health rating scales of the OMFAQ were completed. Results showed that 35% of the 65-74 age cohort were employed, 24% of the 75-84 age cohort, and 23% of the 85+ age cohort. Of these employed women, 19% had excellent physical health, 38% had good health, 35% mildly impaired health, and 8% were rated with moderate to severe impaired physical health. This study shows that women remain in the work force past 85 years and that 43% of this sample's working women continued working past age 65 with less than optimal physical health.

COMPARISON OF INFRARED EAR AND RECTAL TEMPERATURES IN ELDERLY HOSPITAL INPATIENTS

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This prospective study was conducted to assess (1) the agreement between infrared ear and rectal temperatures, (2) the validity of infrared ear thermometry (IET) in detecting rectal fever. Sequential rectal (RT) and infrared ear temperature (ET) measurements were performed using a mercury-in-glass thermometer and a Thermoscan Pro-1® thermometer (unadjusted mode), respectively. Forty-five pairs of measurements were obtained in 45 hospitalized patients (mean age 78.3 ± 6.9 years; 26 female). Fourteen patients had RT ≥ 37.6°C. Linear regression identified a significant positive correlation between ET and RT (Pearson r = 0.78; P < .001). Bias was 0.50°C ± 0.37°C (mean ± SD), limits of agreement were -0.21°C and +1.22°C. The optimal threshold for diagnosing fever by IET was 37.2°C (unadjusted mode). Using this threshold value, the sensitivity and specificity of IET for detecting rectal fever (defined as RT ≥ 37.6°C) were 86% and 89%, respectively. This study suggests that the agreement between ET and RT is good, and that IET is useful for detecting fever in elderly hospital inpatients.

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MOTIVATIONAL AND DEFINITIONAL FEATURES OF THE SELF IN OLDER ADULTS

S. P. Meegan & C. A. Berg, Department of Psychology, University of Utah, Salt Lake City, UT 84112

Participants:

V. Cotrell & K. Hooker (Human Development & Family Studies, Oregon State University, Corvallis, OR 97339) Possible Selves and Individuals with Alzheimer's Disease.

J. Smith, A. M. Freund (Max Planck Institute for Human Development, Lentzeallee 94, 14195 Berlin, Germany) & C. Hauschild (Free University of Berlin, Ulmenallee 32, 14050 Berlin, Germany) Are the Motivational Dimensions of Possible Selves Related to Changes in Well-Being in Advanced Old Age?

S. P. Meegan & C. A. Berg (University of Utah, Department of Psychology, Salt Lake City, UT 84112) Interdependent Appraisal and Pursuit of Life Tasks Among Older Adult Married Couples.

M. Diehl, J. Stanton, V. Buitrago, C. Falconer (Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO 80933) Measures of Self-Concept Predict Psychological Well-Being in Adults Beyond the "Big Five" Personality Traits.

Discussant:

G. Labouvie-Vief (Department of Psychology, Wayne State University, Detroit, MI 48202)

Previous research directed at understanding motivational and definitional features of the self in late life has been conducted within a relatively limited paradigm. Specific personality traits often have been used to understand normal individuals' adaptations to their current environments. The papers presented within the symposium will challenge that paradigm with several important theoretical and methodological contributions. Presenters will describe differences in possible selves among normal and cognitively impaired individuals, changes in motivational dimensions of possible selves across 4 years, the prevalence of interpersonal dimensions within older adults' appraisal and pursuit of life tasks, and the value of considering older adults' self-concept in personality research. The presentations will demonstrate how current understandings of self and personality can be fruitfully informed by including non-normal samples, longitudinal designs, and new measures of self-concept, in addition to giving greater attention to the social context in which motivational and definitional features of the aging self are considered.

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FOUR DIFFERENT INTERVENTIONS WITH MINORITY CAREGIVERS: CLINICAL ISSUES FROM THE RESOURCES FOR ENHANCING ALZHEIMER'S CAREGIVER HEALTH (REACH) PROJECT

M. Rubert Center on Adult Development and Aging, University of Miami School of Medicine, 1425 NW. 10th Ave., Miami, FL 33136 and M. Ory National Institute on Aging, Gateway Building, Suite 533, 7201 Wisconsin Ave. MSC 9205, Bethesda, MD 20892

Participants:
D. Vance, D. Guy, L. Burgio Implementing Behavioral Programs With African American Caregivers of Alzheimer's Disease. (Center for Aging, University of Alabama at Birmingham, Birmingham, AL 35294)
Ana Menéndez, David Coon, Dolores Gallagher-Thompson (VA Medical Center - Palo Alto, Stanford University School of Medicine) Tailoring Psychosocial Interventions to the Latina Caregivers Case Examples from the Reach Project
S. Argüelles, M. Corvea, M. Rubert (University of Miami School of Medicine, Miami, FL 33136). Cuban Americans and Family Therapy: Issues of Engagement and Treatment
T. Vause Earland, L. Gitlin, (Thomas Jefferson University, Philadelphia, PA 19107) M. Corcoran (George Washington University). Cultural Influences on Caregiver Acceptance of a Home Environmental Intervention
Discussant:
C. Eisdorfer (University of Miami School of Medicine, Miami, FL 33136)

This symposium will be of particular interest to persons working with ethnic caregivers of persons with Alzheimer's disease. The role of cultural and sociodemographic factors in shaping clinical reasoning and the intervention process will be illustrated with case studies drawn from four REACH sites. Specifically, these case presentations will be used to highlight these complex relationships between caregiving activities and cultural values. REACH is an initiative sponsored by the National Institutes of Health to examine the feasibility of interventions addressing the caregivers of persons with Alzheimer's disease. Specifically, the implementation of psychoeducational, behavioral, home environmental and family therapy interventions with African American or Hispanic American caregivers will be presented. The discussant will highlight the need for innovative enthogeriatric treatments in light of the rapidly changing ethnic composition of American's elderly.

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INNOVATIVE STRATEGIES FOR OUTREACH AND EDUCATION OF GRANDPARENT CAREGIVERS AND PRACTITIONERS WHO SERVE THEM D. Burnette, School of Social Work, Columbia University , 622 West 113th Streeet NY, NY 10025.

Participants:

L. Bearon, Dept. Family & Consumer Sciences, NC State Univ, Raleigh, NC 27695, M. Brintnall-Peterson, Univ Wisconsin, D. Targ, Purdue University, & K. Follet, NC State Univ. Developing an inventory of educational resources on grandparents raising grandchildren: A national collaboration.

K.J. Follet, Dept. Psychology, NC State Univ, Raleigh, NC 27695 & L. Bearon, Dept. Family & Consumer Sciences, NC State University. Grandparents raising grandchildren: Foundations for educational program development and public service.

D.B. Targ, 1269 Fowler House, Purdue Univ. West Lafayette, IN 47907-1269, M. Brintnall-Peterson, Univ Wisconsin, D. Lago, Penn State Univ. Grandparents acting as parents: Disseminating information through high-tech methods.

D. Joslin, Department of Community Health, William Patterson College, Wayne, NJ 07470 Research as outreach: Lessons from older adults raising grandchildren in the HIV/ AIDS epidemic.

M.J. Van Meter & B.A. Hirshorn, Univ South Carolina, Columbia, SC 29208. Identifying boundary ambiguity and conveying self-management skills when substance abuse is the predisposing factor.

Discussant: Marlene Stum, Family Social Science, Univ Minnesota. St Paul, MN 55108.

As knowledge of the status and needs of grandparent caregivers grows, so does the imperative for methods to access and educate them and professionals in their service network. The first three papers address the collaborative development of innovative outreach and education efforts. Bearon et al. will discuss a comprehensive Grandparent Resource Inventory developed by Extension faculties at several land-grant universities, Follett will present on two information packets, one for grandparents and one for professionals, and Targ et al. will report on two high-tech projects, a website <http://www.nnfr/igen> and a national videoconference for professionals. Van Meter & Hirshorn will then present an education, support, and skill-development curriculum for grandparents in families affected by substance abuse, and Joslin will discuss the potential of research to increase knowledge and facilitate help-seeking among caregivers in families affected by HIV/AIDS.

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SUICIDE IN OLDER PERSONS WITH DEMENTIA

T.L.Vergon, J.E. Malphurs, C. Eisdorfer, D. Cohen. Dept. of Aging & Mental Health, University of South Florida, Tampa, FL 33620 and Dept. of Psychiatry and Behavioral Sciences, University of Miami, Miami, FL 33101

Suicides in older persons with dementia have not been studied empirically. Case reports suggest that dementia patients, especially in early stages of their illness, are susceptible to suicide, and in latter stages frequently express the desire to die. A recent study in our laboratory of antecedents of homicide-suicide and suicide in older married men revealed that 38% of older men who committed only suicide experienced some form of dementia in contrast to none of the homicide-suicide perpetrators. Most dementia suicides (80%) used poisons or cars to kill themselves in contrast to guns, the usual method for older men. The purpose of this study was to determine the prevalence of dementia in older persons who committed suicide. We analyzed 186 cases of men and women 55 years and older who committed suicide between 1993-1997 in one medical examiner district in West Central Florida; 160 sociodemographic, clinical and autopsy variables were coded from medical examiner reports. A total of 20% of the suicide cases had evidence suggestive of dementia, two-thirds were unmarried, and men were more likely to have had a history of dementia. Our results suggest that violent death by suicide in older persons with dementia is not rare. The violence of the suicide method raises questions about the cognitive capacities and motivations for suicide in this group of patients. It appears they can plan suicide but not comprehend the unpleasantness of the method chosen.

FACTORS ASSOCIATED WITH ADVANCE DIRECTIVE COMPLETION IN NURSING HOMES.

S. Rosen Taibel, MSW, H F Ghusn, MD, School of Social Work, University of Houston, Houston VAMC, and Huffington Center on Aging, Baylor College of Medicine, 2002 Holcombe Blvd, Houston, TX 77030.

Several demographic variables such as age, gender, length of stay and presence of surrogate decision maker have been shown to correlate with advance directive (AD) completion in nursing homes (NH). The purpose of this study is to determine the relationship between life satisfaction, reciprocity with family, religiosity & AD completion.

Results: Eighty competent NH residents & 89 next of kins of incompetent patients were interviewed and surveyed respectively. Demographic information, medical diagnoses, ADLs, life satisfaction scores (LISA), reciprocity with family, participation in extended family and religiosity were measured. Increasing age ($p=0.03$) was associated with a higher rate of completed ADs. Completion of ADs correlated with low LISA scores ($p=0.04$) for competent residents and with dependence in ADLs for incompetent residents. Medical diagnoses, religiosity, reciprocity with family, participation in extended family did not correlate with AD completion.

Conclusions: Low life satisfaction was associated with a higher rate of completion of advance directives. Underlying depression, a frequently missed disease in elders, may be responsible for low life satisfaction and should be ruled out prior to finalizing advance directives. Proxies are appropriately taking the functional state of patients into consideration when deciding on advance directives.

Predictors of a Shift in Desire for Life-Sustaining Treatment Among Terminally Ill. **P.S. Reed, E.J. Mutran, M. Danis, Center on Minority Aging, Campus Box 3465, University of North Carolina, Chapel Hill, NC 27599-3465**

Previous research has shown health status and depression to be related to desire for life-sustaining treatment (LST). The purpose of this study is to determine if a shift in desire for LST as one approaches death is associated with depression or declining health status. This study included patients in a North Carolina teaching hospital who had a 6 to 12 month life expectancy, and who completed a baseline and three month follow-up survey (n=177). The patient's attitudes toward LST were measured, as well as health status and level of depression. Pearson correlation analysis showed a moderate change from baseline to three months in patient's desire for medical treatment intervention. Multivariate linear regression analysis, controlling for age, sex, education and race, significantly showed that those in better health at baseline were more likely to reduce their desire for LST over the three-month period. Age was also found to be significantly related, with older persons having less of a desire for treatment. Depression was not found to be related to a change in desire for LST. This shows that as people get older and become less healthy, they become less likely to desire LST, but that the association of desire with depression is stable. With the decision-making and ethical implications surrounding the use of LST, there is a pressing need to increase the understanding of the factors influencing a change in these attitudes as one approaches death. Understanding the reasons for a change in desire for LST could help inform clinicians as to whether they should fulfill a patient's initial desires or those that develop with disease progression.

CHARACTERISTICS OF EUTHANASIA AND SUICIDE AMONG OLDER WOMEN

L.A. Roscoe, J.E. Malphurs, D. Cohen. Department of Aging and Mental Health, University of South Florida, Tampa, Florida, 33612-3899.

Older men commit 81% of suicides in the aged, yet women attempt suicide more often than men, and now our analysis shows older women are more likely to seek Jack Kevorkian's assistance in dying. 72% of his euthanasia cases are women, and women comprise 75% of all cases 55 years and older. Women are at greater risk for inadequate pain relief and depression, both of which have been identified as predisposing factors to euthanasia and suicide, but comparisons of older women who seek physician assistance in dying and those who commit suicide have not been done, for many reasons. We compared the characteristics of 30 older women ($\bar{x}=67.3$, $SD=9.1$) whose deaths were assisted by Dr. Jack Kevorkian in Oakland County, Michigan and a sample of 50 female suicides ($\bar{x}=78.4$, $SD=8.7$) in west central Florida. A total of 160 variables in seven areas were coded from medical examiner files, including incident identification variables, sociodemographic data, physical circumstances, antecedent conditions, and autopsy findings. Chi-square analyses by marital status show significant differences between older women who commit suicide and those who sought Kevorkian's assistance in dying. Euthanasia cases were significantly younger ($t=4.8$, $p \leq .001$), more likely to have indications of pain ($X^2=13.5$, $p \leq .001$), and more likely to have cancer ($X^2=21.6$, $p \leq .001$). Although medical data are sparse for the euthanasia cases, these women appear to have different motivations than those who commit suicide themselves. Important questions raised by this research include the role of medical care utilization and treatment decision-making and the role of psychiatric illnesses in deciding to end one's life.

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C. Camp & J. Brush **USING SPACED-RETRIEVAL MEMORY INTERVENTIONS WITHIN THERAPY SESSIONS FOR OLDER ADULTS WITH DEMENTIA.** Myers Res. Inst. and Rehabilitation Services of the Menorah Park Center for the Aging, Beachwood, OH 44122.

Spaced-retrieval (SR) is a memory intervention that involves giving persons with dementia practice at successfully recalling information over increasing lengths of time. It has been shown to be effective at enabling persons with dementia to learn verbal and motor responses and to retain these responses over extended time intervals. A series of case studies will be presented in which SR is shown to have been successfully implemented by therapists from a variety of disciplines (Speech-Language Pathology, OT, PT, Art, and Music Therapy) within standard (i.e., billable) therapy sessions. SR is shown to be an augmentation of standard therapy sessions that can be superimposed on regular therapeutic activities to enhance the effectiveness of treatment, with little or no additional cost in a therapist's time. Methods of implementing SR within therapy sessions will be presented, along with videotaped examples of SR as implemented by therapists.

COGNITIVE TRAINING EFFECTS ON PRIMARY MENTAL ABILITIES

Saczynski, J.S., Zou, Y., Willis, S.L., & Schaie, K.W.
Gerontology Center, Penn State University, 105 Henderson South, University Park, PA, 16802.

The replicability of cognitive training effects demonstrated in the Seattle Longitudinal Study (SLS) 1984 training study was examined by selecting an additional set of subjects in 1991. Participants in both 1984 (n=229, aged 64 to 95) and 1991 (n=178, aged 64 to 95) were classified into those who had declined and those who had remained stable on the abilities of inductive reasoning and spatial orientation in a pretest-posttest design that employs subjects trained on one target ability as controls for those trained on the other. Training outcomes were analyzed at both the raw scores and the latent factor level. Results for participants of both years show that the training intervention significantly remediated cognitive decliners and enhanced the performance of stable subjects on the target abilities at both the raw scores and the level of latent constructs. In addition, training improvement on spatial orientation was found to be greater for decliners than stable subjects in 1984, but was equal for both groups in 1991. The findings were not specific to gender and were unaffected by education level.

THE IMPACT OF ANXIETY REDUCTION TRAINING ON EVERYDAY SKILL AMONG OLDER ADULTS. B. Hayslip, C. Galt, P. Lambert, K. Kelly, Dept. of Psych, Univ. of North Tx, Denton, TX 76203, J. Elias, Dept. of Psych., Texas Tech Univ., Lubbock, TX, J. Barta, C. Henderson, M. Fielder & A. Reban, Univ. of North Tx.

Seventy-seven older adults (M age=71) were randomly assigned to either a five session anxiety reduction program (n=39), focusing on coping with apprehension about everyday task performance via cognitive restructuring and relaxation techniques, or to a waiting list control condition (n=38). Persons were administered (pretest, 1 week posttest) the ETS Basic Reading Skills test, the Independent Living Scale, the OARS IADL scale, measures of everyday cognitive failures, state anxiety, depression, fluid/crystallized ability, and self rated concerns about everyday functioning. Stress hormone (cortisol) levels were also gathered at each occasion. Hierarchial regression analyses ($p < .05$) indicated that in contrast to controls, training-related gains in ILS Transportation were independent of concerns about everyday skills. For ILS Health and Safety scores, gains via training were greater for younger, less highly educated persons, and for persons who were less anxious and depressed. However, training gains in ILS Social Adjustment were greater for persons who were more anxious and depressed. IADL training gains were greater for those who were less anxious and depressed. For ETS scores, in contrast to controls, training gains did not covary with anxiety and depression. For cortisol, lowered stress levels due to training for greatest for persons with higher Gf/Gc abilities. These data substantiate the role of sociodemographic, cognitive, personality, and metacognitive variables in mediating the impact of stress inoculation training versus practice on the everyday skills of older adults.

THE EFFECT OF NOSTALGIC MEDIA ON DEMENTIA CLIENTS:AN EXPERIMENTAL STUDY.

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Developing activities for people with dementia and evaluating their effectiveness present major challenges to caregivers. During this three-year, Alzheimer's Association funded study, two inventions providing nostalgic music and videos (A Musical Memory Lane-"MML" and a Video Memory Lane-"VML") were developed and tested under several conditions in an adult daycare center. The inventions present music (patriotic, big band, spirituals, show tunes, etc.) and videos ("I Love Lucy," "Honeymooners," Jack Benny, Laurel and Hardy, Ella Fitzgerald, etc.) in an easy access, push button, interactive format. Over 22,000 one-minute observations were conducted of 20 clients participating in normal daycare (live music, bingo/arts & crafts, physical, videos and discussion/reminiscence) and Memory Lane activities. Clients were also observed during "free-times" where they could choose a Memory Lane or three other activities. MANOVAs for repeated measures found that the Memory Lanes had a positive impact on stimulating engagement (p=..02) and positive affect (p=.004) and a mixed effect on interaction and sleeping during the activity. The incidence of negative affect and agitation was too small to conduct inter-activity analyses. Clients chose the Memory Lanes

over other activities significantly more often (p=.0001) during free-time and stayed engaged with the Memory Lanes for longer periods of time (p=.0001). The MML was more engaging than the VML although group size, the format of the activity and the cognitive status/ "engageability"of clients were important intervening variables. Study offers empirical evidence on both the impact of the Memory Lanes and the importance of activities in general for decreasing negative behaviors among people with cognitive impairments.

RELATIONSHIP BETWEEN AD CAREGIVER CHARACTERISTICS AND USE OF ENVIRONMENTAL STRATEGIES M. Corcoran, George Washington Univ., 2150 Pennsylvania Ave., Wash., DC; L. Gitlin, Thomas Jefferson Univ., Phila., PA

Providing care at home has been shown to be stressful for families resulting in poor physical health, depression, and anxiety. Supporting the efforts of family caregivers through the introduction of home environmental strategies represents a promising approach to dementia management. This presentation describes a five-visit home intervention with 100 families of dementia patients during which caregivers were taught to implement environmental solutions to 12 areas of daily management (e.g., bathing, wandering, incontinence). The purpose of this presentation is to describe areas of caregiver concern and the relationship between the use of intervention strategies and caregiver characteristics.

Data were analyzed using frequency distributions and Pearson's r correlation. Four findings are relevant to clinical practice with caregivers. First, on average, caregivers identified 3 management areas of concern. Second, the areas of most concern to caregivers were 1) caregiver-centered problems (e.g. fatigue); 2) incontinence; 3) catastrophic reactions; and 4) wandering. Third, caregivers implemented a higher percentage of modifications to the way they carried out a task (86%) and strategies to meet their own needs (82%) in comparison to manipulation of the physical surroundings (75%). Fourth, low caregiver confidence in handling problems was significantly associated with a higher rate of strategy implementation ($p < .05$). Strategy use was not related to other variables of interest (e.g., gender, family relationship). These findings suggest that clinical decisions about intervention strategies should consider the caregiver's needs, level of confidence and specific concerns about managing dementia. (NIA RO1-AG10947)

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EFFECTS OF TIME-INVARIANT AND TIME-VARYING COVARIATES ON HEALTH DECLINE OVER TIME AMONG OLDER ADULTS: AN INDIVIDUAL GROWTH MODEL APPROACH J.W. Min Department of Social Welfare, UCLA, Los Angeles, CA 90024

Sociodemographic factors such as age, gender, race, income, and education have been shown to affect health status and health decline among older adults. The factors that are assumed to be constant over time provide limited insight into understanding change in health status and dynamics over time. An examination of factors that may vary over time (e.g., change in living arrangement and marital status, contact with children, and so on) would lead to better understanding of health status and health decline over time. The purpose of the present study was to identify initial health status and the rate of change in health status over time, and examine effects of time-invariant and time-varying covariates on the health status and the rate of change in health status among older adults aged 70 and over. Data for the present study were from the 1984, 1986, 1988, and 1990 Longitudinal Study on Aging (LSOA). A two-level multilevel model, specifically individual growth model, was utilized to analyze the data. Health status was measured by the level of basic and social functional limitations (ADL and IADL). Results showed that for initial health status, those who are female, older, less educated, not married, and being Black were more likely to report more health problems. Time-invariant covariates such as gender, age, education, and race had significant effects on initial health status. On the other hand, the rate of health decline over time was found to be greater for those who are older, experience change in living arrangement and marital status, and had less contact with children. Time-varying factors were significantly related to the degree to which older adults undergo the deterioration of health over time. The implication of research methodology and findings for policy and practice will be discussed.

LIFE COURSE SOCIOECONOMIC INEQUALITIES, GENDER, AND MIDLIFE HEALTH: LONGITUDINAL EVIDENCE FROM THE NATIONAL SURVEY OF FAMILIES AND HOUSEHOLDS

Nadine F. Marks, Joseph G. Grzywacz, Child and Family Studies, University of Wisconsin-Madison, 53706.

Lower socioeconomic status (SES) is consistently associated with poorer health across the life course, but disparities increase markedly at midlife, foreshadowing different health pathways in older age contingent on social stratification. As SES inequalities continue to increase in the US and elsewhere, tracking, understanding, and addressing SES differences in health will be an important public health concern in the new millennium.

The aims of this study were 1) to examine the degree to which several lifetime SES factors (parents' education and occupational status; respondent's and spouse's education, occupational status, and earnings; household net worth) are associated with a decline in health status (self-assessed health, functional limitations) over five years during midlife; and 2) to examine gender differences in the effects of different dimensions of SES on change in midlife health.

Data from a sample of 5,068 midlife adults (3007 women; 2061 men) who participated in two waves of the National Survey of Families and Households 1987-1993 were analyzed. Results from multivariate regression models (adjusting for age, race, marital status, and time 1 health) suggest that when considered separately, all the SES factors evaluated are associated with change in one or both health outcomes. Some gender differences are evident. When considered together and net of each other, the most robust SES predictors of health change are a respondent's mother's occupational status during youth as well as a respondent's education, occupational status, and net worth. Future data collection and evaluation related to SES and health should include consideration of gender, occupational status and net worth.

HEART PROBLEMS AND MORTALITY IN DIFFERENT SOCIAL CLASSES. A STUDY OF AN AGING POPULATION IN SWEDEN

I. Kåreholt, Department of Social Work, Stockholm University, S-106 91 Stockholm, Sweden.

Aim: This study analyzes how relative mortality risk varies between persons with and without heart problems in different social classes.

Material and method: A Swedish nationally representative sample of 4,585 persons born 1892-1942 (aged 26-76) was interviewed in 1968. Survivors from the original sample were interviewed also in 1974, 1981 and 1991 until they reached 75 years of age. Persons older than 75 years in 1991 were also interviewed 1992. Subjects were asked about a number of symptoms of poor health. Heart problems are defined on the basis of several items concerning circulatory problems. Cox proportional hazards regression was used to analyze relative mortality risk for the period 1968-1994.

Results: The relative mortality risk varied significantly between social classes. Controlling for heart problems, the mortality risk was 24 percent higher among blue-collar workers than among white-collar workers. The relative mortality risk was 73 percent higher among persons with heart problems than among persons without. This difference was 89 percent for men and 59 percent for women. The difference was significant for both men and women.

The main results are that there was a significant additive interaction ($P = 0.02$) between social class and heart problems among men. Among white-collar workers the coefficient of the difference between men with and men without heart problems was 0.48. The corresponding difference was significantly larger among workers (1.50, $P = 0.01$). The difference was even bigger (2.07) among men without a "proper" work, e.g., long-term unemployed and early retirement pensioners. Because of the higher standard error this difference is only significant at the 10-percent level ($P = 0.08$).

Among women the additive interaction between social class and heart problems was small and insignificant (P = 0.39).

THE EFFECTS OF COMORBID DEPRESSION AND DIABETES ON THE HEALTH OF OLDER MEXICAN AMERICANS.

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Using longitudinal data from the Hispanic EPESE survey, we examined the effects of concomitant depression and diabetes on the health status of older community-dwelling Mexican Americans, a population that experiences high rates of both disorders. Rates of comorbid conditions, incident complications, disability, and declines in functional status among diabetics were compared for the presence and absence of both high levels of depressive symptoms (using the CES-D scale) and diagnoses of depressive disorders (using the CIDI depression module). Logistic regression was then used to examine the impact of comorbid depression on health burden among the diabetics. Rates of comorbid myocardial infarction, hypertension, arthritis, ADL disability, and diabetic complications were found to be significantly higher in the presence of high levels of depressive symptoms at baseline and at follow-up, as well as lifetime prevalence of major depressive disorder or dysthymia at follow-up. Lifetime prevalence of depressive disorder was found to be a stronger predictor of incident kidney disease, gallbladder disease, and diabetic complications, whereas high levels of depressive symptoms proved a better predictor of functional status and functional decline. These results indicate that comorbid depression increases the impact of diabetes on physical and functional health in older Mexican Americans.

SOURCES OF RESILIENCY IN COPING WITH SECONDARY CONDITIONS AMONG PERSONS AGING WITH DISABILITY

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For the first time in history, people with early-onset of severe disability are surviving long enough to experience both the risk and rewards of later-life. The problem is that as they age into mid-life, many of these "survivors" experience the onset of new, unexpected health problems and functional limitations (i.e., secondary conditions) that threaten to further erode independence and increase the "costs" of disability. The purpose of this paper is to evaluate the effectiveness of different sources of resiliency in coping with the impact of secondary conditions on quality-of-life outcomes (i.e., depression, life satisfaction and number of disability bed days). Data are from a cross-sequential, group comparison study of 550 individuals aging with the long-term effects of polio (220), rheumatoid arthritis (180) and stroke (150). Participants were selected from a hospital or community-based subject pool via a stratified random design, and range in age from 30 to 87, with a mean of 62. Sources of resiliency include health promoting behaviors, use of informal support networks and attitudes towards disability and health locus of control. ANCOVA models provide consistent evidence of the protective or "stress-buffering" effect of informal support and attitudes on QOL outcomes. Among respondents with high levels of secondary conditions, those with larger support networks and more positive attitudes towards disability have significantly lower depression scores and higher life satisfaction than their counterparts with the same level of risk but less access to protective resources. Results are discussed in terms of opportunities for new intervention approaches.

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ALZHEIMER'S DISEASE AND SYMPTOM-SEEKING

L.G. Hodgson, Dept. of Sociology, Quinnipiac College, Hamden, CT 06518; S.J. Cutler, Dept. of Sociology, Univ. of Vermont, Burlington, VT 05405.

For men and women who have a parent with Alzheimer's disease (AD), their own memory lapses often take on great significance. With the knowledge that AD has a genetic component, the middle-aged children of afflicted parents are prone to exhibit anticipatory dementia, the fear that middle-aged memory losses are the first signs of the disease. One manifestation of this fear is the phenomenon of symptom-seeking–the tendency of genetically at-risk individuals to be vigilant for signs of the disease in their own actions. This presentation will offer a descriptive analysis of symptom-seeking behavior and systematically explore the degree to which symptom-seeking takes place in a sample of adult children of parents with AD. A pilot study was conducted with 25 at-risk individuals and a matched control group of 25 individuals with no family history of the disease. A contextual analysis of the qualitative data yielded common themes and patterns related to symptom-seeking behavior. Based on the reports of the respondents, symptom-seeking can be categorized into three discrete behaviors: repeatedly checking oneself for signs of AD, interpreting cognitive change as a symptom of the disease, and asking for external validation of symptom interpretation.

This research was funded by an Alzheimer's Association/F.M. Kirby Pilot Grant.

ADVANCE CARE PLANNING IN NURSING HOMES: RESIDENT CAPACITY AND SURROGATE TREATMENT PREFERENCES

S. Delaine, R. Allen-Burge, L. D. Burgio, D. L. Marson, A. Freytag, & E. Jackson, University of Alabama at Birmingham, Birmingham, AL 35294.

The purpose of this study is to assess the relationship between resident capacity and discrepancies in life-sustaining treatment preferences as reported by residents and surrogate decision-makers/sponsors. The capacity of the nursing home residents to participate in treatment planning was assessed at four increasingly stringent legal standards: evidence of choice, appreciation of consequences, rational reasons, and understanding. Resident and surrogate treatment preferences were also assessed. Fifty-three resident-sponsor dyads participated across three nursing home sites. The average age of residents was 83 ($SD = 8$). Results indicated residents were more likely to report a desire to initiate CPR (61%), ventilation (59%) and tube feeding (45%) than were their sponsors (41%, 14%, and 32%, respectively). The correlation between resident treatment preference and sponsor preference was low ($r = .03$). A scoring system for transcripts of audiotapes made for the assessment of residents' decision-making capacity revealed that a majority of residents can state a simple treatment preference, but do not retain the capacity to appreciate the consequences of their decisions or to understand treatment alternatives. This finding has direct implications for the usefulness of PSDA implementation in this setting.

THE RELATIONSHIP BETWEEN ADVANCE CARE PLANNING AND EARLY STAGE ALZHEIMER'S DISEASE

R. Allen-Burge, M.D. Zwahr, & M. Sarris, University of Alabama at Birmingham, Birmingham, AL 35294, M. Storandt, & E. LaBarge, Washington University, St. Louis, 63130.

Advance care planning in the beginning stages of a dementing illness is critical due to the need to communicate treatment wishes while individuals retain decision-making capacity. The purpose of this study was to investigate: (a) the type of advance planning activities reported by patients and controls in an Alzheimer's Disease Research Center, including possession of living wills or informal discussions with others; (b) whether the tendency to report engagement in formal advance care planning such as signing a living will varied by cognitive status; and (c) the relationship between advance care planning, cognitive abilities, health and depression. Two hundred thirty one participants (M age = 78, $SD = 9.28$) with a higher than average level of education ($M = 13.77$, $SD = 3.38$) at Washington University's ADRC were included. Forty-three percent of the sample had no cognitive impairment, 27% were questionably demented, and 30% had symptoms of dementia in the mild to moderate range of severity. Preliminary findings indicate that 74% of participants reported having either a living will or durable power of attorney for health care. Another 12 percent reported engaging in informal discussion of treatment preferences with others, but 15% reported having made neither formal nor informal advance care plans. Tendency to make formal plans differed by dementia severity, $\chi^2 = 11.64$, $p < .01$, with those in the questionable or very mild stage of dementia being the most likely to engage in advance planning. Multivariate logistic regression analyses will investigate cognitive ability, depression, and health status as predictors of advance care planning formality among cognitively intact and very mildly to mildly demented older adults.

A PSYCHOMETRIC EVALUATION OF THE REVISED MEMORY AND BEHAVIOR PROBLEMS CHECKLIST-NURSING HOME

R. Ragsdale, R. Allen-Burge, L. D. Burgio, & E. Bodner, University of Alabama at Birmingham, Birmingham, AL 35294, L. Teri, University of Washington.

The Revised Memory and Behavior Problems Checklist-Nursing Home (RMBPC-NH) measures the frequency of behavior problems exhibited by residents and two different types of burden associated with these behavior problems: (a) the degree of burden experienced by nursing assistants in providing care; and (b) the degree of burden experienced by other residents and staff on the unit. Behavior problem frequency and burden were assessed across four subscales: (a) cognition, (b) emotion, (c) function, and (d) disruption. Preliminary data for 44 nursing home residents (M age = 82, $SD = 9$) from three nursing homes was used to assess the internal consistency, test-retest, and inter-rater reliabilities of the new measure. The RMBPC-NH behavior problem frequency items were found to be internally consistent ($\alpha = .83$). Internal consistency reliabilities for frequency items within each subscale ranged from ($\alpha = .56$) for disruption to ($\alpha = .78$) for cognition. Test-retest ($r = .79$) and inter-rater ($r = .66$) reliabilities for these items were adequate, given the small sample size. The two burden categories were found to be highly intercorrelated ($r = .99$). Internal consistency for nursing assistant burden ranged from ($\alpha = .40$) for function to ($\alpha = .79$) for cognition. For burden related to social ecology, internal consistency ranged from ($\alpha = .49$) for function to ($\alpha = .79$) for cognition. Results show that the RMBPC-NH is a reliable indicator of the frequency of behavior problems and certain types of burden, but that it does not adequately assess nursing assistant and social ecology burden for the function or disruption subscales.

LINGUISTIC REGRESSION IN ALZHEIMER'S-TYPE DEMENTIA MAY INVOLVE A "PARADIGMATIC-SYNTAGMATIC" SHIFT

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The syntagmatic-paradigmatic shift is a well-documented phenomenon in child development. It involves a general change in word associations from sequential (such as within the context of a sentence; e.g., DOG-RUNS) to paradigmatic (such as words that are the same part of speech; e.g., DOG-CAT) as the child ages. First-in-last-out theories of Alzheimer's-type dementia might predict a reverse-shift as linguistic regression occurs. In fact, previous authors have noted similar regressions among other linguistic phenomena, like bilingual regression with loss of the language learned more recently. In the current study, confrontation responses to concrete nouns were documented. Individuals with Alzheimer's-type dementia who produced the fewest paradigmatic associations could still produce syntagmatic associations, with $F(1, 8) = 6.35$, $p < .05$, $MSE = 418$, for the within-subjects comparison (paradigmatic v. syntagmatic responses). Implications for a "paradigmatic-syntagmatic shift" in Alzheimer's-type dementia will be discussed.

EVALUATION OF THE "BE ACTIVE WITH GAMES" [BAG] PROJECT FOR FAMILY CAREGIVERS AND THEIR FAMILY MEMBERS WITH ALZHEIMER'S DEMENTIA

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This qualitative evaluation research focused on individuals with AD who were cared for at home by a family caregiver. It aimed to assess the responses of family caregivers and members to a bag of 20 items designed by the Stein Gerontological Institute to be "therapeutic." In-depth interviews with and observations of 21 caregiver/member dyads were analyzed according to Spradley's ethnographic method. Responses to the BAG were contingent upon the family member's symptoms, prior experience, and time of day. For some caregivers the BAG was useful in filling time, inspiring additional activities, facilitating connections with the family member, and connecting family members with their past; for others it was an additional burden in an already frenetic life. The BAG engaged some family members with AD while it "insulted" others. The value of activities for individuals with AD needs more theoretical and methodological exploration.

CAREGIVER TRAINING: EFFECTS OF ENHANCED COMMUNICATION SKILLS IN DAT PATIENTS ON CAREGIVER SATISFACTION AND BURDEN. Jason Freeman, Ralph Barocas, Linda Chrosniak, Department of Psychology, George Mason University, Fairfax, VA 22030.

We evaluated a prosthetic memory procedure designed to enhance Alzheimer's patients' communication skills in conversations with caregivers. Photographs obtained from caregivers and other visual prompts were used by caregivers in a delayed onset multiple baseline with reversals for three groups of 2 dyads each. We analyzed daily Relationship Satisfaction (Hendrick,1988) and Relationship Burden (Whitlach et al., 1991) data obtained over 34-42 days. Baseline and non-treatment observations were contrasted with treatment observations. We expected improved communication in the DAT patients to yield greater caretaker satisfaction and less burden, a goal not yet achieved with this procedure. All interactions were audiotaped and coded. Burden means of medians for treatment and non-treatment were not different from each other ($t(5)=.74$, NS). Similarly, contrasts on Positive and Negative Affect (Watson et al., 1988) on treatment and non-treatment days were non-significant ($t(5)=-.78$, NS; and, $t(5)=2.48$, NS, respectively). However, partner Satisfaction was significantly higher on treatment days ($t(5)=2.76$; $p=.04$). Results show that the procedure enhanced relationship satisfaction without influencing burden or self-reported affect. Implications are discussed.

Measuring and Improving Quality of Life in Persons with Advanced Alzheimer's Disease

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Enhanced quality of life is a valued state of being for persons with advanced Alzheimer's disease [AD] institutionalized in long term care [LTC] settings. However, the quest to measure and improve quality of life in persons with advanced AD is nothing less than a daunting task. Our pilot project integrates two sources of data which shed light on the measurement and improvement of QOL in this patient population.

Qualitative reports from spouses of LTC patients with advanced AD, suggest that involvement in meaningful activity enhances the QOL of their loved ones. Conversely, spousal reports reflect a marked decrease in perceived QOL when meaningful activities are absent. Similarly, intensive behavioral observation pre and post a therapeutic walking intervention, reveal a significant: increase in environmental engagement; increase in time spent interacting with others; improvement of mood; decrease in daytime sleeping; and increase in mobility for these patients. These objective measures confirm the value of meaningful activity and its positive impact on QOL.

Our pilot data suggest that qualitative reports and objective measures must be combined in order to fully appreciate the interplay of meaningful activity and QOL in persons with advanced AD. Interdisciplinary collaboration between nursing and occupational therapy personnel will lead to a more holistic approach to improving QOL for persons with AD in LTC settings.

The effect of executive dysfunction and functional disability on caregivers of Alzheimer's Disease patients. M. Patterson, J. Mack, J. Stuckey, M. Barry and T. Fritsch. Alzheimer Center, 12200 Fairhill Rd., Cleveland, OH 44120.

This study evaluated a model in which executive dysfunction, in combination with effects of dementia severity, contributes directly to AD patients' functional disability and indirectly to caregiver experience through the mediating effects of functional disability. Functional disability was assessed with the Cleveland Scale for Activities of Daily Living. Scores from four neuropsychological tests of executive function (Porteus Mazes, Key Search Task, Cognitive Estimation Test and Tinkertoy Test) were standardized and pooled to obtain a domain indicator. Dementia severity was measured by duration of dementia and the Short Blessed mental status exam. Self-administered questionnaires were used to measure 4 aspects of caregiver burden: physical (caregiver health), mental (complaints of nervousness, irritability and sadness), social (loss of social contacts), and intention to institutionalize. Path analysis of 42 patient-caregiver pairs showed that dependence in instrumental ADL mediates the effect of dementia duration on intention to institutionalize, mental burden and social burden. There was a direct effect of physical dependency on intention to institutionalize. When executive dysfunction was considered in conjunction with disease duration and mental status, there was no effect on functional dependency or caregiver burden.

Supported by the Eli Lilly Company and the National Institute of Aging (# P50 AG08012).

EFFECT OF FAMILIAL AND PERSONAL HISTORY OF DEPRESSION ON DEPRESSIVE STATUS IN PATIENTS WITH ALZHEIMER'S DISEASE

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Depressive syndromes are common in Alzheimer's disease [AD]. The present study examined the differential association of family and personal history of depression with mood disorders among patients with AD. Data were obtained from 161 participants in an Alzheimer's Center registry and analyzed using hierarchical logistic regression. Alone, prior history of depression (i.e. predating onset of cognitive decline) did predict depression in AD. However, after adjusting for family history of major depression or suicide, there was no incremental contribution to the model provided by an individual's personal history of major or minor depression. For this sample of patients with AD, it appears as though a family history of depression is a better predictor of depression in AD than is a personal history of depression.

Supported in part by NIA Grant 08012.

AN EVALUATION OF CHANGE OVER TIME ON EVERYDAY PROBLEM SOLVING AMONG DEMENTED OLDER ADULTS.

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Difficulty performing everyday cognitive tasks has been recognized as a forewarning of more global decline and a signal for the termination of an older adult's independent, community dwelling status. Therefore, identifying the predictors and correlates of change in everyday competence is important for designing interventions that may prolong self-maintenance and independence. Although a few studies have examined change over time in an objective assessment of everyday competence among cognitively normal populations, fewer have conducted similar studies among older adults with cognitive deficits. The present research was part of The Stanford Longitudinal Alzheimer's Project conducted at the Stanford Medical Center's Aging Clinical Research Center. All participants (n = 64) have met the National Institute of Neurological and Communicative Diseases - Alzheimer's Disease and Related Disorders Association criteria for probable Alzheimer's disease. Performance on everyday tasks was examined twice at six month intervals. At both occasions, patient and caregiver self-reports of everyday competence (IADL), scores on the MMSE and the GDS (Global Deterioration Scale), and patient age were significantly associated with the objective measure of everyday competence, the Everyday Problems Test for the Cognitively challenged Elderly (EPCCE). A repeated measures ANOVA indicated a significant main effect of time, with participants declining an average of 2 points (8% decline) on everyday cognitive tasks over the 6-month interval. Multiple regression analyses suggest that Time 1 assessment of everyday problem solving may be the best predictor of everyday cognitive competence at the later evaluation point.

BIOPSYCHOSOCIAL ASPECTS OF DEPRESSION IN ALZHEIMER'S DISEASE.

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There is high prevalence of depression coexistent with Alzheimer's Disease, perhaps related to psychosocial factors (e.g., anticipation of loss) or physiological effects of the disease (e.g., neurological decline). In a study of 575 Alzheimer's patients, half were depressed. Significant predictors of depression were psychosocial and biomedical, including behavioral impairment, White racial identity, and caregiver burden (R Square= .24). The salience of the predictor variables are discussed in the context of a biopsychosocial model of depression in Alzheimer's Disease, especially since variables representing a medical model approach (e.g., physical and cognitive impairment, late stage disease) failed to predict patient depression.

Somatic health and non-cognitive symptoms in mild Alzhimer's disease patients.

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Behavioural symptoms are relatively frequent in AD patients and the relationship with somatic health is little understood. Aim of the study was to evaluate the influence of somatic health indicators on behavioural symptoms in a homogeneous sample of mild AD patients. Forty-six (M:8; F:38) consecutive AD patients showing a mild cognitive impairment (mean MMSE: 20.7±2.3; CDR ranging between 0.5 and 1), a mean age of 76±4 years, mean educational level 5.4±2.3 years, mean duration of the disease of 34.7±8.2 months have been enrolled in the study. The Neuro Psychiatric Inventory scale, an instrument providing data on the presence of 10 behavioural symptoms (delusion, hallucination, agitation/aggression, dysphoria, anxiety, euphoria, apathy, disinhibition, irritability, and abnormal motor activity) has been used (mean score: 19.91±15.32; range: 0-70). Subjective physical health was evaluated with a scale assessing the presence of symptoms spontaneously or after inquiry. Somatic health was computed as the number of chronic diseases. Among the list of behavioural symptoms assessed, only depression was positively associated with the presence of hypertension ($p<.05$). Moreover, depressive disturbances were associated with a higher number of somatic symptoms ($p<.05$), whereas apathy was associated with a lower number of somatic disorders ($p<.05$). The study may indicate that among mild AD patients, those manifesting depression must be considered particularly frail.

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LOCUS OF CONTROL AND MORTALITY AMONG OLDER PERSONS IN JAPAN.

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As a dimension of personality, locus of control has received considerable attention as a determinant of health and well-being. However, its role in predicting old age mortality has not been adequately examined. The relationships between control and mortality were examined in a prospective study of a national sample of 2,200 elderly Japanese during a 3-year period. In particular, a sociomedical model of health was employed by which the linkages between locus of control and mortality were analyzed by including socioeconomic status, social relationships, and health status as covariates. Direct and indirect effects of locus of control were assessed by using hazard rate models in conjunction with ordinary least squares regression. When socioeconomic and health variables are controlled, locus of control does not exert any direct effect on mortality. Instead, it influences mortality indirectly through social networks and health status variables. On the other hand, older age, lower education, and female gender are associated with less control.

Examining Cross-Cultural and Cohort Differences in Leisure Activities

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The present study examined patterns of age differences in leisure activity levels between Chinese and American adults. Such exploration provided a comparison of activity profiles between cultures that might add additional evidence to the growing body of knowledge concerning variability in leisure participation. It also examined gender differences in variability in activities within each culture. Data collected for this study included 540 American subjects from the Seattle Longitudinal Study (male=242, female=298), with age ranging from 20 to 80 years. The Chinese sample consisted of 121 adults (56 women and 65 men) aged 20 to 80 years selected from Tianjin, People's Republic of China. Leisure activity factors were assessed with a measure known as the Life Complexity Inventory which provides information on the many aspects of the participants' micro-environment. A MANOVA was used to examine patterns of cohort and gender differences in leisure participation across the two cultures. Significant main effects were found for sex, cohort, and the sex by cohort interaction ($p<.05$).

PERCEPTIONS OF FILIAL RESPONSIBILITY AS DESCRIBED BY ELDERLY MOTHERS AND THEIR DAUGHTERS IN A TRANSITIONING RURAL COMMUNITY IN THE PHILIPPINES

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The lack of in-depth cross-cultural research in filial responsibility is reflected in the paucity of such literature focused upon the Philippines. This case study examines the filial attitudes and expectations of aging mothers and their adult daughters residing in a community in the Philippines. The community identified for this research is located 20 minutes away from a growing city in the province of Laguna, Philippines. It is described as a "transitioning rural community" due to its' previous isolation and present increase of contact with the outside world and its' western influences. This location is similar in situation to a variety of other communities in the Philippines. The sample consists of 50 mother-daughter dyads. Elderly mothers were 60 and older, with the age of 60 and above being traditionally described as elderly in the Filipino culture. Daughters ranged in age from 20 to 59. Each member of the dyad was interviewed by paid interviewers who were professionals and members of the community. Interviews explored the meaning of filial responsibility as expressed and perceived in the dyadic relationship. Qualitative analysis revealed several themes. Daughters' themes reflected caring for their mothers based upon religion, love and/or repaying mothers. Mothers perceived their daughters caring as tied to obligation, tradition, duty and "who else would do it?". Daughters' filial expectations about their future care in comparison to their mothers' present filial expectations are also explored. Implications for family life, roles, and responsibilities are discussed.

HEALTH BEHAVIOR OF OLDER PEOPLE IN A PLURALISTIC SYSTEM: THE CASE OF EASTERN NEPAL

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Medical pluralism, which includes the availability of both modern and indigenous health care services is common in many developing societies. Research shows that in such societies often the modern health care services have to compete with the widely and popularly used indigenous health care sources. Hence, it is important and necessary to understand the conditions that affect the choice to seek a particular type of health care. This study examines the various sources of health care that influence the health behavior and outcomes among the Jirel elderly, a tribal group distributed across nine villages in the Jiri Rewgion of Dolakha district, eastern Nepal. The findings indicate a widespread belief in and use of alternative sources of health care. Modern medicine is often used as a last resort. The paper concludes with a discussion of the implications of the findings for future program and policy implementation.

ATTITUDES TOWARDS DEPENDENCY AND SOCIAL SUPPORT AMONG THE JAPANESE ELDERLY

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Increased dependency and the need to rely on others for care are an inevitable state for many frail elderly. A number of Western gerontologists contend that Japanese elders have an easier time in adjusting to a state of dependency in comparison to their U.S. cohorts because Japanese culture facilitates dependency as an essential dynamic in interpersonal relationships. This research investigated attitudes and behaviors regarding dependency and receiving support, and its effect on well being among Japanese elders. Structured interviews were conducted with 474 randomly selected Japanese elders and in-depth interviews were conducted with 20 elders. Regression analysis found that positive attitudes towards receiving informal support and comfort towards depending on family members predicted well being. In-depth interviews, however, found that fear of becoming a burden was an important variable in determining their comfort level towards dependency. The notion of self-perceived burden will be discussed as an important concept in understanding attitudes towards dependency among Japanese elders.

HEALTH STATUS OF THE ELDERLY IN TAIWAN--ITS IMPLICATION TO THE CHINESE POPULATION IN BRITISH COLUMBIA BASED ON THE MINIMUM DATA SET FOR HOME CARE

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This major purpose of this paper is to examine health status of the elderly in Taiwan based on the Minimum Data Set for Home Care. Issues involved in cross-cultural instrument translation and the implication of MDS-HC Chinese version to the study of Chinese population in British Colombia are discussed.

The health status are measured in terms of Client Assessment Protocols (CAPS). CAPS include triggers for (1)Functional Performance: ADL/Rehab potential, IADL interventions, health promotion and institutional risk, (2)Sensory Performance: communication disorders and visual function, (3)Health Problems: cardio-respiratory, dehydration, falls, nutrition, oral health, pain, pressure ulcers, skin and foot conditions, (4)Continence: bowel management, urinary continence & catheters, (5)Service Oversight: adherence, brittle support system, medication management, palliative care, preventive health care measures, psychotropic drugs, reduction of formal services, environmental assessment, and (6)Mental Health problems: alcohol abuse, cognition, behavior, depression & anxiety, elder abuse, and social function.

This study collected data from 402 Taiwanese elders. Twenty nurses were trained two times before conducting interview for data collection to ensure standardization process. Results show Taiwanese elderly have better health status when compared to general Canadian population, however, have similar health problems when compared to Chinese Canadians. Discussion and suggestions are provided for further studies.

BRINGING CULTURE-RELEVANCE TO GERONTOLOGY

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A few years ago the gerontological sub-discipline concerned with cross-cultural studies of aging was denounced to be atheoretical. The present atheoretical predicament of cross-cultural gerontology was claimed to have been the result of the fact the sub-discipline in question had failed to generate its own theoretical frameworks.

Argued henceforth is the fact that conducting gerontological inquiries within a culture doesn't necessarily mean that the results obtained are about that culture. In light of this, we argue that if cross-cultural gerontology is to amend its present atheoretization and bring culture to the fore of its inquiries, we must compliment our concern with culture-specificity and aim for culture-relevance as well. Discussed hereby is therefore the role value orientations play in shaping the way in which cultural understandings of aging-related issues are formed. On the basis of this discussion, we suggest that cultural values be the basis for the generation of a culturally-relevant theoretical framework of the kind that is lacking at present.

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PHYSICIAN UTILIZATION BY HISPANIC ELDERLY: A NATIONAL PERSPECTIVE

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This study describes the status and needs of Mexican American, Cuban American and Puerto Rican elderly persons and examines predictors of physician utilization for the total sample and for each national origin group. Data are from the 1988 National Survey of Hispanic Elderly Persons. Conceptualizing the variables in terms of the Andersen-Newman model of health services utilization, the authors used hierarchical multiple regression models to test the differential impact of predisposing, enabling, and need factors on physician use. An additive model was significant, with enabling and need factors contributing to use and an interaction model of national origin by other independent variables was also significant, with significant, but different interactions for Mexican Americans and Puerto Ricans. In the group-specific models, IADL impairment was a shared predictor for Mexican and Cuban Americans, but all other predictors were unique. In addition to specific predictors, the importance of considering national origin group in research on health service use by Hispanic elders is discussed.

SUPPORT SYSTEMS AND DAILY LIVING STRATEGIES OF INDIAN PARENTS WITH EMIGRANT CHILDREN

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This study examines how parents with emigrant children cope on a daily basis, as well as the support systems that replace the functions of their emigrant child. How are their emotional, financial, and health needs met?

Qualitative interviews based on a semi-structured interview schedule were conducted in India in the winter of 1997. Eight widowed persons and 19 couples (age 55+) were selected using a snowball method. Data were analyzed with QSR NUD*IST. Results show that parents do not rely heavily on their emigrant children for financial support, 20 had complete ownership of their home and their daily living expenses were minimal. Only eight persons were employed. However, most could not afford to meet unexpected medical expenses and relied heavily on their children for this support. Widows particularly were dependent, often turning all their assets upon their husband's death over to their non-emigrant children. Most had support from their extended family for meeting daily needs such as banking and transportation. However, the biggest source of daily support came from hired help. Only one couple could not afford hired help. Hired help allows parents to live independently and decreases reliance on informal support systems. Since hired help is relatively inexpensive most parents can substitute help for their children. This does not alleviate feelings of loneliness and depression.

LATE LIFE IMMIGRATION, DISABILITY AND LIVING ARRANGEMENTS IN THE OLDER MEXICAN-ORIGIN POPULATION

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In this study we employ two waves of the Hispanic Established Populations for Epidemiologic Study of the Elderly (Hispanic- EPESE) to determine whether late life migrants to the United States live with their families as a non-head of household versus a head of household, especially when they become ill. The results show far more individuals who immigrate after age 50 are the non-head of the household in which they reside than either the native born or those who immigrate at younger ages at the time of the follow-up. In addition, individuals who report some disability and those with lower incomes are more likely to move in with others rather than have someone move in with them. We discuss these findings in light of recent changes in eligibility for social welfare programs and speculate on the consequences of these restrictions for the long-term care of older Mexican American immigrants and their families.

NEUROPSYCHOLOGICAL TEST PERFORMANCE IN A SAMPLE OF ELDERLY JAPANESE AMERICANS

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Although unrecognized language and cultural biases can lead to false-positive dementia misclassification rates, few data exist describing the performance of normal minority elderly on cognitive screening tests. In this paper, neuropsychological test results will be presented for 144 cognitively intact Japanese-Americans (age 75+; mean education = 10.7 years; 58% Japanese speaking) enrolled in a community-based study of the dementia in King County, WA (the *Kame* project). Subjects underwent a standard evaluation that included the CERAD Neuropsychological Assessment Battery (animal fluency, 10-word list acquisition and recall, confrontational naming, constructional praxis and recall), the Trail Making Test, WAIS-R Digit Span and Digit Symbol subtests, Purdue Pegboard, finger tapping speed, and the Cognitive Abilities Screening Instrument (CASI). Summary tables (mean, SD, 25th, 50th, and 75th percentiles, range) will be presented for persons age 75-84 (N=91) and age 85+ (N=53), for those with <12 years education (N=77) vs. 12+ years education (N=65), and for Japanese (N=79) vs. English-speaking participants (N=57). Persons who were older, less educated, and Japanese-speaking performed generally lower than their younger, better educated, or English-speaking counterparts. Study results also showed a pattern of lower performance on verbal (fluency, naming, recall) tasks in this population than has been reported for majority culture individuals of similar age and education, whereas average scores for other cognitive domains (e.g., motor speed, construction) were comparable to published norms.

KEY ELEMENTS IN THE EXPERIENCE OF AGING FOR IMMIGRANT WOMEN

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While there has been considerable research about the lives of young women who have immigrated to this country, little attention has been paid to the unique experiences of their female elders. This exploratory study involved 2 hour qualitative interviews with women born in Asia or the Caribbean (n=25). It focused on key elements during childhood, immigration and assimilation which impact on the experience of aging in this country - and which need to be understood for culturally competent training of gerontological practitioners. Key findings identified included 1) limited education because of gender, 2) a tendency to have gravitated towards traditionally female service jobs or lifelong caring roles at home, 3) complex and often troubled relationships with male partners, 4) frequent reliance on non-family female support persons, 5) importance ascribed to having children, 6) special relationships with grandchildren which include sustaining and passing on the original culture and language, 7) observation of attitudes towards the elderly as less positive here than in their first country, and 8) emotional identification with country of origin. It was concluded that immigrant experiences added inner strength in old age based on overcoming multiple changes & losses.

Constructing and Deconstructing a Reservation Nursing Home: A Community Study of the Laguna Pueblo Indians.

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American Indians are not unique in their struggle to find the best solution in caring for their elders. Increased longevity worldwide has brought this issue to the forefront of health care. What is unique to Indians is their strong sense of tradition coupled with the circumstances of reservation life. This research examines how one American Indian group, the Laguna Pueblo, believe they have solved the problem of elder care by borrowing from contemporary Anglo society, the structure of a nursing home and elder care center.

The goals of this study were two-fold. The first goal was to understand the historical and social circumstances that promoted the construction of the Laguna Rainbow Elder Care Center. To accomplish this goal, semi-structured open-ended interviews were conducted with four key groups of people who are the primary "stake-holders" in the Center. They included: nursing home residents; senior center participants; staff of the Center; and those community members who were influential in the inception of the facility.

The second goal was to understand, once constructed, what the Laguna Rainbow Elder Care Center means to those individuals who were identified as "stake holders". To accomplish this goal interviews were conducted in which respondents were asked to reflect on the 'meaning' the Center provides for them.

Content analysis was conducted on the interviews and thematic categories were developed. Additionally, participant observation was used to provide the researcher with direct experience of the daily events at the Center.

The National Indian Council on Aging reported at the White House Conference on Aging that nursing home care is a primary concern to all tribes (NICOA, 1995). The increased life expectancy of Indians makes the issues of long term care arrangements more salient for today's elders and for generations to come.

CHARACTERISTICS OF THE CARE RELATIONSHIP THAT INFLUENCE INSTITUTIONALIZATION

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The purpose of this study is to explore the characteristics of the care relationship that influence institutionalization with particular emphasis on the role of ethnicity. This study was conducted by the Center on Minority Aging in which 551 caregivers were interviewed. Variables of the care recipient that were of interest included: adl and iadl, gender, age, and their use of community services. Responsible party variables included: gender, ethnicity, education, income, age, and if they helped the care recipient with their limitations in adl or iadls. The dependent variables were quality of care and housing /economic concerns. The results showed that the iadl (β=.257), responsible party's ethnicity (β=-.159), and the care recipient's age (β=.107) were characteristics that were significantly associated with having quality of care as a factor to institutionalize the care recipient. The responsible party's ethnicity (β=.102), the responsible party's age (β=-.144), and help with iadl (β=.154) were all factors associated with having housing/economic concerns as a factor to institutionalize the care recipient. In both the quality of care and housing/economic variables, ethnicity, age, and iadl were significantly associated with institutionalization. This supports the literature that ethnicity, age and iadl are all factors that predict and increase the risk of institutionalization for elders. This study was funded by the National Institute on Nursing Research.

RACIAL AND ETHNIC DIFFERENCES IN SERVICE USE: INEQUITY, ACCESS, OR CULTURE?

J. Montoro, K. Kosloski, INCIS, Valencia, Spain, and the University of Nebraska at Omaha.

Demand for health and social services has consistently been shown to vary by ethnicity, although the source of this difference is unknown. The purpose of the present study was to evaluate possible causes by addressing a series of research questions within the Andersen behavioral framework, using data from the National Health and Nutrition Examination Survey III. First, using logistic regression, racial differences were found in the manner in which need variables affected the use of discretionary services, but not non-discretionary services. In addition, there were no racial differences in the manner in which enabling factors affected service use. This suggested that the source of racial differences was either due to ethnically-based difficulties in accessing services or to differing cultural beliefs concerning appropriate use. Additional analyses were performed to evaluate these two explanations. Focusing only on the Hispanic subsample, it was found that after controlling for the significant effect of knowledge about how to access services, level of acculturation had no impact on discretionary service use. These findings suggest that differences in apparent demand may be due to ethnically-based differences in knowledge about how to access services and structural barriers rather than to differing cultural beliefs that may serve to define the appropriate conditions of service use.

BREAST CANCER SCREENING AMONG OLDER PUERTO RICAN WOMEN: BELIEFS, KNOWLEDGE AND PRACTICES.

Himilce Vélez-Almodóvar, Melba Sánchez-Ayéndez, Erick Suárez-Pérez, Marlén Oliver-Vázquez, Graduate School of Public Health University of Puerto Rico, PO Box 365067, San Juan, PR 00936-5067.

This presentation describes older Puerto Rican women's knowledge and beliefs of breast cancer and screening tests, and the relationship between them and reported screening practices. It focuses on the knowledge and misconceptions that the women have of breast cancer and screening methods and the extent to which they follow recommended guidelines or are concerned about breast cancer.

Data were gathered through interviews with 500 Puerto Rican women 65 and older. A nation-wide sample stratified by socioeconomic status and area of residence participated in the study. Analysis of the data indicate that clinical breast examination was the most often used early detection practice, followed by the mammogram; with self examination a distant third. Most of the respondents know about the ways to detect breast cancer and of some symptoms related to it, and also that the possibility of breast cancer increases with age. In terms of beliefs, most of the respondents thought that hitting, bruising or hurting the breast can cause breast cancer. Many also believed that women who had never had intercourse were not at risk of developing the disease. Education and age were determining factors for differences in knowledge and beliefs. Analysis also focused on other demographic variables affecting knowledge and beliefs and on the relationship between a specific knowledge or belief item and detection practices. Research on minority older women should focus on detection and recognition of personal factors that hinder following recommended screening.

A BREAST CANCER HEALTH PROMOTION PROGRAM FOR OLDER PUERTO RICAN WOMEN. Marlén Oliver-Vázquez, Melba Sánchez-Ayéndez, Erick Suárez-Pérez, Himilce Vélez-Almodóvar, Yamilet Arroyo-Calderón, Graduate School of Public Health, University of Puerto Rico, P.O.Box 365067, San Juan, PR 00936-5067.

This presentation focuses on a model health promotion program for the early detection of breast cancer in elderly Puerto Rican women. The program was designed based on the findings of a national survey conducted to assess the knowledge, beliefs, and early detection practices of breast cancer of women in this age group and their perceptions of barriers associated to non-compliance. The program intends to minimize barriers for early detection and increase the elderly women's compliance with recommended guidelines. It involves the combination of educational and environmental supports for actions and conditions conducing to health. It consists of the following components: (1) a culture and cohort- sensitive health education program for elderly women on breast cancer and assertive strategies for the client-physician relationship, (2) a training for primary-care health providers on current guidelines for women 65+ and barriers affecting compliance among older women in Puerto Rico, and (3) coordination of necessary support services to facilitate access to clinical breast examinations and mammograms. The program was implemented on a metropolitan area in Puerto Rico. The evaluation measured the progress on the plan implementation and assessed the inmediate products, as wella as the long term impact results of the program.

Evaluating a measure of everyday problem solving for use in African-Americans.
T. A. Baker-Thomas, K. E. Whitfield, M. Gatto, & Y. Williams, Department of Biobehavioral Health, Penn State University, University Park, PA 16802.

Results from previous research on everyday problem solving involving Caucasians suggests that it may be a useful concept in studying cognitive aging in African Americans. The purpose of this investigation was to examine: 1) the factor structure of an everyday problem solving in a sample of African Americans 2) the internal consistency of everyday problem solving in a sample of African Americans, and 3) the relationship with demographic factors, physical functioning, and measures of fluid ability. The sample included subjects recruited from Baltimore, MD. and consisted of 249 community dwelling African American adults, 32% of which were male, with a mean age of 67.8 years (S.D.=8.47). Variables included in the analyses were the Everyday Problem Solving Test (EPT), gender, age, education, and inductive reasoning. The results evinced a structure similar to previous research. Everyday problem solving as a latent construct was confirmed and the split half reliability was high (.89). We also found that certain domains of the EPT are influenced by demographic factors more than others. In summary the results suggest that the EPT is viable measure to assess everyday problem solving in adult African Americans.

THE EFFECT OF ACCULTURATION ON THE ASSOCIATION BETWEEN EDUCATION AND DISEASE IN MINORITY ELDERS: A CONSEQUENCE OF SURVIVAL A. P. Cupertino, R. A. Whitmer, & M. N. Haan Dept. of Human and Community Development, University of California at Davis, Davis, CA 95616

Although the association between education and disease has been examined in elderly minority, the degree to which acculturation impacts disease-education association is not fully understood. The purpose of this paper is to examine the effect of education on disease outcomes for different levels of acculturation and age. We hypothesized that differences in the influence of education on disease between less and more acculturated elders would be lower in the oldest old due to poorer survival in less acculturated elderly. Using the Older Sacramento Health Survey (OSHS), (Age Mean=71.72 SD=8.13) we examined the association between education and health among English (n=303), Bilingual (n=203) and Spanish (n=83) speaking elders. Our health outcomes include cardiovascular problems, respiratory problems, functional status measures (ADL and IADL) and mini mental scores. Using age stratified analysis, we found that for the 60-69 group, education was inversely associated with respiratory disease and cardiovascular disease only for those who are English speaking ($p<.001$). For the 70-79 group, education was inversely associated with cardiovascular problems ($p<.001$) and IADLS for English speaking only. For the 80-89 groups there were no significant main or interaction effect among English, Bilingual and Spanish groups. These findings support the contention that differences between Hispanics and Anglos decline among the oldest old. Surprisingly, education does not appear to have a protective health effect for minority elderly.

The influence of social support on everyday problem solving in Adult African-Americans.
K. E. Whitfield, T. A. Baker-Thomas, M. Gatto, Y. Williams & J. Graham, Department of Biobehavioral

Health, Penn State University, University Park, PA 16802.

Previously research suggests that social support is critical for independent living among African Americans. The purpose of this study was to examine the relationship between social support and everyday problem solving in African Americans. The sample included subjects recruited from Baltimore, MD. The sample consisted of 249 community dwelling African-American adults, 32% of which were male, with a mean age of 67.8 years (S.D.=8.47). Variables included: Everyday Problem Solving Test (EPT), social support given and received, physical functioning, counts of chronic illness, smoking, and demographic information. Using linear regression, we found that education, age, physical functioning, and social support (given) were significant predictors of the EPT. Then using a structural equation modeling, we tested whether social support (given) had a direct or indirect influence on everyday problem solving. We found support for direct influence of social support on everyday problem solving but not a indirect influence mediated by health. The results indicate that there may distinct differences in the cognitive abilities of those who give and receive social support to carry out everyday activities.

DISABILITY INCIDENCE IN RURAL HISPANIC (H) AND NON-HISPANIC WHITES (NHW). The San Luis Valley Health and Aging Study. R.F.Hamman, S.M. Shetterly, J.Baxter, Preventive Medicine and Biometrics, U. of CO Sch. Med., 4200 E. 9th Ave, Denver CO, 80262

We previously reported that the prevalence of any difficulty with activities of daily living (ADL) was similar between H and NHWs, but H were more likely to report needing assistance (NA) with ADL and instrumental ADL (IADL) tasks. We report here the first analysis of incident disability in this rural biethnic community of Colorado.

544 H and 482 NHW community dwelling residents were free of disability at baseline and completed a visit 1.8 years later. Mean age was 72 years. Age-adjusted H versus NHW rate ratios and (95% CI) for incidence of 'any' reported difficulty or NA for ADL or IADL tasks were:

Any difficulty		Needing assistance (NA)	
ADL	IADL	ADL	IADL
1.1 (0.9-1.5)	**1.6** (1.2-2.0)	**0.98** (0.7-1.3)	**1.2** (0.9-1.5)

Patterns were consistent by gender except H men had higher incidence of ADL difficulty than NHW men (1.8; 1.1-2.8) but H women were not higher than NHW women (0.8; 0.6-1.2).

Excess NA prevalence, but no excess incidence of NA in H might suggest that mortality should be lower in H. However, mortality rates were very similar overall. The excess difficulty seen here may evolve into excess NA, though longer follow-up is needed to confirm this expectation. The lack of excess ADL difficulty among H women is discrepant and needs further investigation.

HISPANIC (H) AND NON-HISPANIC WHITE (NHW) ELDERS ATTITUDES ABOUT NURSING HOME CARE: THE SAN LUIS VALLEY HEALTH AND AGING STUDY (SLVHAS). J. Baxter, S. Scarbro, S. M. Shetterly, R. F. Hamman Department of Preventive Medicine & Biometrics, University of Co. Health Sciences Ctr, Denver, CO 80262

Earlier findings from SLVHAS found NHW elders were 2.7 times more likely to be in nursing homes (NH) than H elders. This analysis examines demographic and psychological correlates of attitudes about NH use in a biethnic rural, Colorado population.

Subjects were H (595) and NHW (497) with a mean age of 72 years. Responses to "Children should care for their parents, rather than placing them in a nursing home" (NHNO) and "If I can not care for myself, a nursing home is the best place to go" (NHYES) were each analyzed using descriptive statistics and logistic regression.

Univariate analyses indicated some degree of ambivalence, where 59% agreed with NHNO, and 61% agreed with NHYES. A significantly greater proportion of those who agreed with the NHNO statement were H, 70≥ years old, male, less educated, more depressed, and more likely to have a higher external health locus of control (EHLC). Logistic models retained these as independent associations (p=<0.003), except for depression. Interaction tests revealed that Hs with a higher EHLC were 2.6 times more likely to agree with NHNO compared with Hs with a lower EHLC. Agreement did not differ by EHLC for NHWs Those who agreed with the NHYES were more likely to be NHW, female and more educated. Ethnicity and gender remained independently significant in NHYES models.

Hispanics, men, and less educated persons were more negative about NH care. These results indicate several dimensions of variability in elders attitudes about NH care.

A LAST RESORT: AFRICAN-AMERICAN ELDERS' USE OF NURSING HOMES. L. Groger, Department of Sociology, Gerontology and Anthropology, P.S. Mayberry, J.K. Straker, Scripps Gerontology Center, Miami University, Oxford, OH 45056.

We conducted eight focus groups and 60 individual open-ended face-to-face interviews with care recipients and caregivers in three different care settings to explore how they feel about nursing homes and under what circumstances they use them. The youngest participants were the most adamantly opposed to nursing homes. Elders' own health, their perception of frailty, their fear of becoming a burden on kin, their own caregiving history, and their experience with and knowledge about nursing homes shaped their attitudes about and use of nursing homes. Used as a last resort, nursing home care enhanced delivery of kincare; provided security for care recipient and peace of mind for caregiver; re-established a sense of competence and well-being; and provided refuge from inadequate or unsatisfactory kincare. Nursing home placement as an option of last resort was often embraced more enthusiastically by elders than their families. Families could be helped greatly if outreach by and accurate information about nursing homes were an integral part of long-term planning.

DIFFERENCES IN VOLUNTEER STATUS BETWEEN AFRICAN-AMERICANS AND WHITES. H. M. Braunschweig, Philadelphia Geriatric Center, 5301 Old York Rd. Philadelphia, PA 19141. N.D. Peters, Beaver College, Glenside, PA, G.C. Graham, Case Western Reserve University, Cleveland, OH.

African-Americans have appeared to participate in volunteer activities at lower rates than their white counterparts. However, recent data has shown that while African-Americans volunteer less overall, once they begin volunteering they spend equal amounts of time as do white volunteers. This research is based on interviews with 356 community dwelling older persons between the ages of 64 and 95. Significant differences were found in rates of participation. For example, while 44.5% of white subjects volunteer, only 25.8% African-American subjects volunteer (chi square=11.98;d.f.=1;$p \leq .001$). There were no differences found, however, in the number of hours spent volunteering, the major reason given for volunteering or the type of organization between African-American and white volunteers. Discussion focuses on the promotion of volunteerism as an aspect of aging well. (R29-MH48119)

EXTREME SOCIAL ISOLATION AS A DETERMINANT OF 5 YEAR MORTALITY
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The effect of extreme social isolation on 5 year mortality was examined in a national sample of Black and White elders. The analysis uses the Longitudinal Study on Aging (LSOA). Consistent with previous research on the link between social integration and mortality, elders who were extremely socially isolated were hypothesized to have a higher 5-year mortality rate compared to non isolated elders. Results of Cox regression analysis controlling for age, education, income and health status found that extremely isolated elders were three times more likely than non-isolated elders to die within the 5-year study period. The magnitude of the effect varied by race and sex.

EXPLORING RACIAL DIFFERENCES IN ADAPTATION TO AGE-RELATED VISION LOSS.
C.A.McKinzie, D. Benn, J. P. Reinhardt, The Lighthouse Inc., 111 East 59th Street, New York, 10022

There is a paucity of research on ethnic differences in adjustment to physical impairment in later life. The purpose of this study was to begin to explore the differences and similarities in adaptation to age-related visual impairment in older White (n=290) and African American adults (n=38). Comparisons were conducted with ANOVAs or chi-square analyses depending on the level of measurement for the following: sociodemographic variables, vision and health characteristics, functional disability, social resources (support given & received), personal resources (coping strategies, locus of control, mastery), and outcome variables (depressive symptoms, life satisfaction, adaptation to vision loss). Results showed that while White elders were significantly older than African Americans, the latter were more disadvantaged in terms of marital status and income adequacy. While more White elders had macular degeneration and more African Americans had glaucoma, functional vision loss severity did not differ. While general health did not differ, African Americans did experience higher functional disability. Overall, support variables did not differ. However, African Americans did report significantly greater need for instrumental and emotional support. Importantly, personal resource variables did not differ significantly. Regarding outcome, only the measure of adaptation to vision loss showed a significant difference with Whites having higher adaptation. Ideas for future research considering the role of race and adaptation will be discussed.

ELDERLY RELIGIOUS REFUGEES FROM THE FORMER SOVIET UNION – IN THE CRUCIBLE OF ADJUSTMENT M. Sokolovsky, School of Family Studies, University of Connecticut, Storrs, CT 06269.

Russian-speaking population of Greater Springfield, MA exceeds 5,000 and contains the fourth largest in the US community of Pentecostal Christian and Evangelical Christian refugees from the former Soviet Union. Adjustment problems of the elderly representatives of these groups arise on several levels but most of them can be characterized by the mismatch between individual developmental goals and social structure and demands of their lives. For instance, problems of studying English (frequently presented as memory problems) may be explained by lack of pragmatic necessity to learn the second language; depressive symptoms can be traced to the gap between spiritual demand to focus on higher realms of life and pragmatic necessity to master everyday life within a different cultural tradition; a developmental goal of integration of one's life interferes with a threat of reviving traumatic memories and fears of sharing personal history. The presentation will: a) describe and analyze specific adjustment problems of elderly refugees from the former Soviet Union; b) share therapeutic interventions and existential vignettes that the author found useful in working with this particular group; and c) use the example of elder refugees to discuss the problem of mismatch between the unique qualities of elderly persons and demands of a social niche they occupy.

CULTURAL DIFFERENCES IN ANXIETY ABOUT AGING. P. FAULKENDER & A. TUCKER & R. Glidewell. Department of Psychology, University of Southern Mississippi, Hattiesburg, MS 39406-5025.

The purpose of this study was to examine differences in aging anxiety, as measured by the Anxiety about Aging Scale, between Black and White participants. There were 1321 participants in the original norming samples. Because there were more White participants, a randomly selected sample of White participants were selected from the larger sample and compared to the 240 Black participants. Black participants had significantly less aging anxiety than White participants. A secondary analysis indicated that Black participants reported higher quantity and quality of contact with the elderly. Data will be reported for age and scale differences on the Anxiety about Aging Scale.

SOCIAL DETERMINANTS THEORY AND THE PREDICTION OF DEPRESSED AFFECT IN OLDER BLACKS

D.Fyffe, D. Smyer, C. Magai, B. Thorpe, R. McPherson & A. Evans-Ross. Department of Psychology, Hofstra University; Long Island University.

George (1994) proposed a social antecedents model of depression in later life. Research with Caucasian elders has generally supported the model, but there has been relatively little research on its applicability to non-Caucasian samples. Previous work has shown an association between depression as measured by the Beck's Depression Inventory and depressed affect as measured by the Differential Emotions Scale (DES). In the present study, we tested the social antecedents model with Black elders reporting overall negative affect and depressed affect.

Participants were 156 community-dwelling older Blacks (mean age=75 years), half from the US, half from the Caribbean. Measures included the DES, Social Network Scale, Religiosity Index, Acute Stressors Scale, Financial Strain Index, Emotion Regulation Scale and Perceived Prejudice Scale. Variables were entered in six blocks according to George's model using hierarchical regression:(1) demographics (age, sex, ethnicity), (2) early events (education), (3) later events (income, marital status), (4) social integration (religiosity), (5) vulnerability and protective factors (stressors, financial strain, social supports), and (6) provoking agents and coping efforts (prejudice, emotion inhibition, expression, distraction).

The overall model accounted for 26% of the variance in negative affect and 20% for depressed affect. Only stress and emotional inhibition contributed significant independent effects. Some aspects of George's model were supported.

BASICS OF CULTURAL DIVERSITY FOR HEALTH CARE PRACTITIONERS THROUGH DISTANCE EDUCATION

A. J. Finestone, K.A. Segrist, J. Hennon

How to best relate to health care clients of diverse backgrounds has not been taught traditionally in health care professionals curriculum. To assist current practitioners to better serve their clients, the Institute on Aging and GEC/PA provided a half day program entitled, "Caring for the Elders: Geriatrics in Ethnic Communities" through the PA HealthNet system (land line).Content included an overview of ethnicity and aging, model of multicultural understanding, concepts and clinical strategies to accommodate cultural differences, and an overview of ethnic health care beliefs and practices. Participants at 8 sites were given a pre and post test at the program and a post test 3 months after the program. Participants improved their test scores by 20% the day of the program and 10% on the 3 month post test. Additionally, participants three months later indicated better ability to relate to current clients and a preparedness to address the needs of future culturally diverse clients. Plans are underway to utilize the system to present other programs in 1998.

Latino Elderly: An Analysis of Health and Social Risk Factors and their Relationship to Fatal and Non-Fatal Conditions

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Utilizing data from the Assets and Health Dynamics of the Oldest Old (AHEAD), we examine the prevalence of fatal and non-fatal diseases among Latino and Non-Hispanic White elders age 70 and over.Through the use of OLS regression we explore the relationship between various health and social risk factors including smoking, alcohol consumption, body mass, depression, and social isolation and the prevalence of fatal and non-fatal diseases. The results indicate that Latino ethnic groups are disadvantaged relative to Non-Hispanic Whites for diabetes and arthritis. Non-Hispanic Whites are disadvantaged for heart conditions. The Latino disadvantage for diabetes is related to greater body mass, alcohol consumption, and ethnicity (being Puerto Rican). Arthritis prevalence is related to body mass, depression, and ethnicity (being Mexican American). The Non-Hispanic White disadvantage for heart conditions is related to smoking, alcohol consumption, and gender. Implications for the development of health promotion and disease prevention programs are addressed including the relevance of targeting public health initiatives.

RAISING ANOTHER GENERATION

M.R. Crowther, Department of Psychology, Duke University, Durham, NC, 27708.

Very little is known about the nature, impact, and consequences of surrogate parenting. Grandparents who are primary caregivers for their grandchildren struggle with setting priorities and deciding how to divide their time, energy, and financial resources. The purpose of the present study was to explore the growing problem of

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grandparents raising grandchildren. The study was a cross-sectional, case control investigation of the factors affecting the health and well-being of 92 African American grandparents. Two case groups were included, grandparents raising grandchildren because their children are addicted to crack/cocaine and those raising grandchildren for reasons other than the substance use of their children. The control group consisted of grandparents not raising grandchildren. One testing session was done in which participants were interviewed and asked to fill out standardized questionnaires. The results indicate that grandparents raising grandchildren report an increase in health problems after they began caregiving and they are also more depressed than grandparents not raising grandchildren. Appraisal of caregiving, coping, and proximity of social support were found to be significant factors in adjustment to caregiving. The qualitative data indicates that grandparent caregivers involved in this project are dealing with multiple issues related not only to their surrogate role, but to work responsibilities, and personal growth and development as well. The findings have implications for research, policy, and practice.

CONTEXTUAL INFLUENCES ON INTERGENERATIONAL RELATIONSHIPS: THE EFFECTS OF GEOGRAPHICAL, CULTURAL, AND TEMPORAL FACTORS ON MOTHER-DAUGHTER RELATIONSHIPS. P. M. Usita, Department of Child Development and Family Studies, Purdue University, West Lafayette, IN 47907-1269.

Gerontologists and family scholars advocate for deeper understanding of the complex array of social and cultural factors that affect individual and family development. Social and cultural factors such as geography, culture, and time have the potential to influence intergenerational ties. The purpose of this study was to examine relationship outcomes among a sample of mothers and daughters whose experiences straddled geographical regions, cultural beliefs and traditions, and sociohistorical times. Twenty-two immigrant mothers who were reared in Asia and daughters who were reared in the U.S. reported on the effects of social and cultural influences on their relationships. The results indicated that geographical, cultural, and temporal contexts shaped and continue to guide relationship expectations and outcomes. Implications of this research for practitioners working with ethnic minority families include the need to examine parents' and children's unique and overlapping social and cultural contexts. This research underscores the need to investigate the effects of social and cultural contexts on ethnic minority families.

KOREAN-AMERICAN PARTICIPATION IN THE SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM.

Fred J. De Jong, Ph.D., Jun Hee Kim, M.S.W., Social Work, University of Southern California, Los Angeles, CA 90089-0411

Little is known about potential effects of Korean-American (KA) participation in the Senior Community Service Employment Program (SCSEP). This federal program provides elder employment and encourages unsubsidized enrollee placement. The KA elder population is the fastest growing sub-population in the U.S. KA elders increased 309% from 1980 to 1990. A large proportion of these are recent immigrants who possess limited or no English and depend on SSI. KA enrollees in New York and Los Angeles (N=70) form a judgement sample, in which all were immigrants, with a median age of 65, 27% less than a high school education and 60% male. The KA enrollees report improvements in economic self-sufficiency (76%), less dependence on family (64%), improved felt status in family and society (62% and 64%, respectively). While most enrollees express overall satisfaction with the program, specific program revisions may be warranted in outreach to KA elders, job supervision, training, and preparation for unsubsidized placement.

THE EFFECTS OF ENGLISH LANGUAGE PROFICIENCY ON HEALTH STATUS OF OLDER HISPANICS IN THE UNITED STATES

S. Brallier and J. E. Mutchler, Department of Sociology, State University of New York at Buffalo, Buffalo, NY 14260

The purpose of this paper is to consider the implications of English language proficiency for health status in later life. Using data from the 1990 Census of Population and Housing, estimates of English use and proficiency levels are generated for older Hispanics residing in the United States. The estimates suggest that particularly among those born outside of the U.S., as well as among many native-born older individuals, English proficiency is poor. The extent to which older individuals are linguistically isolated, or reside in households where no one speaks English proficiently, is also highly variable.

In our examination of the association between language use, linguistic context, and health, we find that older individuals who have difficulty with the English language experience poorer health. Aspects of the linguistic context, relating to ethnic concentration in the community, language use in the household, and English proficiency levels among spouses, appear to moderate this effect to some extent.

THE NIH RESOURCE CENTERS FOR MINORITY AGING RESEARCH: Center for Advancing Minority Aging Research Efforts, EJ Mutran, PI, U. North Carolina; Columbia Center for Active Life of Minority Elders (CALME), RA Lantigua, PI, Columbia U., Michigan Center for Urban African American Aging Research, JS Jackson, U. of Michigan, J Dywer, Wayne State U.,Co-PI's, Native Elder Research Center, SM Manson, PI, U. Colorado HSC; Resource Center for African American Aging Research, BC Tilley, PI, Henry Ford Health System; Resource Center for Aging Research in Diverse Populations, EJ Perez-Stable, PI, U. Calif. San Francisco

The long-term objective for the NIH funded Resource Centers for Minority Aging Research is to reduce the gap in health status differentials between aging minority and Caucasian populations. In order to achieve this objective Centers are developing new minority investigators with an interest in research in aging in minority populations and encouraging experienced researchers to expand their research to minority aging populations. The Centers are also developing measurement tools tailored to aging minority populations and are developing approaches to increasing community liaisons and recruitment of community members into Center studies. While all Centers are structured around four cores, Administrative, Investigator Development, Measurement, and Community Liaison, Center Cores also use some unique approaches, as described in the posters.

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GENDER DIFFERENCES IN FILIAL RESPONSIBILITY AMONG CHINESE CAREGIVERS

Heying J. Zhan, Department of Sociology, University of Kansas, 716 Fraser, Lawrence, KS 66045

This paper examines gender differences in filial responsibility among Chinese caregivers who are currently taking care of frail and dependent elder parents. It analyzes data collected in 1997, at a time when China is undergoing drastic social and economic changes which have left many, if not most, retirees without pensions or access to medical care. This study finds a gender division in filial responsibility toward parental care. It reveals that sons tend to assume financial support and management as their major area of filial responsibility while daughters are more likely to provide direct personal care to dependent parents.

IDENTIFYING FAMILY CAREGIVERS IN CHINESE AND FILIPINO AMERICAN FAMILIES WITH AGING PARENTS

P. S. Jones, Loma Linda University, School of Nursing, Loma Linda, CA 92350

The fastest growing group of older Americans is Asian/Pacific Islanders. In many cases the parents, Filipino families e.g., have followed their children, primarily daughters, to the US. These women are usually employed full-time and involved in parenting roles. This study is part of a larger investigation of family caregiving by Chinese and Filipino American women caring for elderly parents. This report will describe how caregivers are identified in these two cultural groups and how 'family' is defined in terms of family support for caregiving. Interviews with 15 Chinese and 15 Filipino American women caring for elderly parents will be reported. Care receivers include parents and parents-in-law in a variety of living arrangements: living together, separately, and long-distance. Two Filipino American caregivers were in cross-cultural marriages. Greater than 50 percent are living in the same household with their aging parents. Availability and resources for caregiving were the primary factors influencing who became caregivers. Definition of 'family' to assist with family caregiving was more inclusive of extended family members among Filipino families than in Chinese families.

WOMEN AS PRIMARY CAREGIVERS TO FRAIL PUERTO RICAN ELDERLY: SOURCES OF STRESS AND CONFLICT. Melba Sánchez-Ayéndez, Program of Gerontology, Graduate School of Public Health, University of Puerto Rico, PO Box 365067, San Juan, PR 00936-5067.

This qualitative investigation examines the circumstances in which 30 Puerto Rican middle-aged women carry out tasks of informal support to frail elderly parents and sisters. Average number of caregiving years was eight. Results from the The General Well-Being Schedule indicated that 57% of the carers were in moderate distress, 10% in severe distress, and 33% reported positive well-being. Caregiving tasks performed daily or every other day were: light household cleaning, giving the old person a bath, and meal preparation. Tasks performed on a routine basis but not daily were: washing and ironing clothes, shopping for groceries, medicines or other items, taking the elderly for a ride or to buy clothes or other articles, taking the elderly to medical appointments, and financial management.

Half of the women expressed that they were "somewhat satisfied" and would like more cooperation from those in the kin network; 47% stated that they were rarely helped by relatives except by a primary helper and that secondary helpers could not be counted on most of the time except during crises. Principal sources of conflict faced were: problems with family members or the care recipient, problems with employment, problems pertaining to personal or health matters of the carer, and problems related to role as main carer.

Findings provide insight into the dynamics of caretaking of frail elderly and the role of primary carer. Carers have to make choices due to multiplicity of roles that are the result of a strenuous decision.

CAREGIVERS AND POTENTIAL CAREGIVERS: DIFFERENCES BEHIND RACE

C. V. Flynn, M. M. Franks, J. W. Dwyer, Institute of Gerontology, Wayne State University, Detroit, MI 48202.

Differences between Black and White Caregivers in their experience of the stress of caregiving has been well documented by the caregiving literature. It has been suggested that race itself is not the main contributor to such variance, but that race represents other constructs. Investigations of filial expectations data on 218 adult children aged 35 and over whose living parents had not required chronic care and 151 whose parents did require care during the previous year may lend some understanding to this issue. Nearly all non-caregivers in both race groups indicated that they would provide care if their parents needed it in the future. There were no significant race differences in the present or the future likelihood of being a primary caregiver. Among caregivers and non-caregivers, Black participants reported significantly lower incomes, a greater number of living siblings, were less often married and their parents were less likely to be married as well. In multivariate models including race and the other covariates, only number of sisters predicted being a primary caregiver in the currently caring group. Results suggest that although Blacks and Whites did not differ on caregiver expectancies, their social context did differ, perhaps contributing to race differences in outcomes associated with adult-child caregiving.

DIFFERENCES BETWEEN BLACK AND WHITE CAREGIVERS ON THE FINDING MEANING THROUGH CAREGIVING SCALE.

Eunice Eunkyung Choi, MS., RN., GNP., C.J. Farran, DNSc., RN., FAAN., & L. Fogg, PhD.
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The purpose of this cross-cultural methodological study was to determine differences on the items of the Finding Meaning Through Caregiving Scale (FMTCS) between Black and White caregivers. Secondary data analysis from an existing study was conducted using modified item response theory. The data consisted of a total of 225 subjects, 77 Black and 138 White spouse caregivers of persons with Alzheimer's disease. The 43-item FMTCS has three subscales: Loss/Powerlessness, Provisional Meaning, and Ultimate Meaning. Reliability and sensitivity of the FMTCS in Blacks and Whites has been established. As predicted, Blacks reported lower mean levels on the Loss/Powerlessness Subscale (M=61.45, SD=10.41, p<.001); and higher mean levels on the Provisional Meaning (M=78.19, SD=7.53, p<.01) and Ultimate Meaning (M=21.49, SD=2.43, p<.001) Subscales; and higher levels on Total Finding Meaning (M=152.23, SD=14.68, p<.001).

Data analysis by item response theory revealed that Black and White caregivers differed in response patterns to two items on the FMTCS Loss/Powerlessness Subscale and two items on the FMTCS Provisional Meaning Subscale. No difference was found on the FMTCS Ultimate Meaning Subscale. There were also differences in response patterns with several items by caregivers' gender and educational levels.

These findings support the necessity of examining and understanding cross-cultural differences in caregivers' positive caregiving experiences on the items of the FMTCS.

FACTORS INFLUENCING THE UNDERUTILIZATION OF DEMENTIA PROGRAMS BY HISPANIC CAREGIVERS

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The over-65 segment of the Hispanic population is projected to quadruple over the next twenty years. Along with this increase, the number of Hispanics with dementing illnesses will inevitably grow. Results from research studies suggest that large proportions of older Hispanics with dementia are cared for at home through an extended family network. Accommodating the caregiver role and activities requires extensive life adjustment and can often result in numerous psychological strains for caregivers such as symptoms of depression and anxiety. Despite the tremendous burden that accompanies the caregiving role, research indicates that Hispanic cargivers delay utilization of services until the final stages of the illness. This paper will report on the research findings from a comprehensive review of the literature and will discuss the possible factors that contribute to the underutilization of long-term care and community based services by Hispanic families. Variables such as familial obligation, guilt, language difficulties, and lack of education regarding dementia will be discussed as mediating variables. Innovative and creative psychoeducational strategies to increase the utilization of services and alleviate familial burden will be presented.

RELATIONSHIP BETWEEN ELDER CAREGIVER CHARACTERISTICS AND PATIENT HEALTHCARE UTILIZATION.

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Frail elderly persons living in the community often rely on informal caregivers to assist them with their activities of daily living. While the absence of such caregivers has been shown to increase the risk of nursing home admission and hospitalization in dependent elderly, less is known about how individual caregiver characteristics affect elder health care utilization. The purpose of this project is to determine which caregiver characteristics increase the likelihood that the persons they care for will utilize a greater number of healthcare services. The data for this study is derived from the Honolulu Heart Program (HHP), a longitudinal study of heart disease and stroke in Japanese-American men born between 1900-1919. During the fourth exam of the surviving cohort in 1991-93 information was gathered from a group of 880 participants and their caregivers as part of a study on caregiving and dementia. The main outcome variables being evaluated are the HHP participant's need for hospitalization, nursing home placement, and use of other community healthcare services. To isolate the independent effect of caregiver characteristics on the elderly participant's use of healthcare resources, statistical analyses include adjustments for participant variables previously shown to increase the use of healthcare services in the elderly. Preliminary results using one-way ANOVA revealed that caregiver characteristics associated with increased participant healthcare use included western (as opposed to Japanese) acculturation (p=.05), younger age (p=.01), higher education (p=.05), and lower life satisfaction (p=.001). There was also an association with greater healthcare use among elderly participants whose caregivers were sons (p=.001), were not living with the participant (p=.001), and who had a paying job (p=.05). These preliminary results emphasize the impact of certain informal caregiver characteristics on healthcare utilization in the elderly.

EXCHANGE TYPE, INTENSITY OF NETWORK SUPPORT AND FAMILY COHESION AMONG CAREGIVERS TO AFRICAN AMERICAN ELDERLY.

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Groups with a strong ethnic heritage stressing family cohesion may be at risk in caregiving. The overall purpose of this study was to determine the relationship of social structural variables, exchange type, and network intensity to family cohesion among caregivers to older African Americans. Dual exchange theory was used to explain family cohesion. The theory posits that family cohesion is related to social structural factors, exchange type (restrictive vs generalized), and network structure. Generalized exchanges are viewed as contributing to cohesion. The sample were primary caregivers to 166 elderly care recipients selected from a larger parent study of 4162 non-institutionalized adults aged 65 years or older at Duke University

(EPESE). Average age of primary caregivers was 55 years. Exchange types were most often restricted (58%) rather than generalized (42%). Hierarchical multiple regression analysis results partially supported 2 of 3 hypotheses ($R^2 = .14$, $p < .001$). Family cohesion increased with the functional health of primary caregivers, among the widowed than the separated, and with satisfaction with network support. Other social structural and network variables and exchange type were not important in explaining family cohesion. Generalized exchanges did not contribute to increased family cohesion. It was concluded that dual exchange theory provided only limited insight into the relationships between social support, network structure, and interaction patterns among primary caregivers to African American elderly. Implications are discussed.

Supported by NIA Grant RO1 AG12268-01

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IMPACT OF DEMENTIA-ASSOCIATED BEHAVIORAL PROBLEMS ON CAREGIVER DISTRESS.

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Behavioral disturbances accompanying dementia are assumed to play a role in the onset of caregiver stress and burden. In light of this, our study examined indices of caregiver mental health among: 1) caregivers whose family member was newly evaluated for cognitive impairment and 2) caregivers whose family member presented with and was assessed and treated for behavioral disturbances accompanying dementia. It was hypothesized that caregivers of behaviorally-disturbed patients would display greater levels of burden, anxiety, and depression than would caregivers of newly-diagnosed patients.

A total of 157 sets of caregiver scales were retrospectively reviewed; 54 had been completed by caregivers of patients referred for the diagnosis of dementia and 103 were completed by caregivers of dementia patients seen for behavioral management. Caregiver age did not differ by group, $F(1,145) = 0.21$, $p > .05$. Patients cared for by the two groups of caregivers were equal in terms of MMSE, $F(1,156) = 1.27$, $p > .05$, and duration of cognitive impairment, $F(1,156) = 0.18$, $p > .05$.

Of primary importance was the finding that levels of burden, depression, and anxiety were all significantly higher among caregivers in the management group than among caregivers in the diagnostic group, multivariate $F(3,153) = 4.79$, $p < .01$. These results indicated that caregivers of cognitively impaired patients whose behavior is disturbed are more negatively impacted upon by the caregiving situation than are caregivers of patients whose behavior is under control. Overall, these results suggest that disruptive behavior accompanying dementia may be a more important determinant of caregiver burden, depression, and anxiety, than cognitive impairment alone.

A COMPUTER NETWORK FOR ALZHEIMER'S CAREGIVERS AND USE OF SUPPORT GROUPS

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Computer networks of informal caregivers may potentially serve as an alternative to more traditional face-to-face support services. A randomized intervention involving 98 family caregivers of persons with Alzheimer's disease tests the effect of a computer support network on support group attendance. Two competing hypotheses are examined: one posits that the use of a computer network will be substituted for participation in support groups, while the alternative hypothesis states that the computer network will supplement or increase use of support groups. A one year longitudinal analysis indicates a relationship between use of the computer network and changes in support group attendance. The relationship, however, sometimes involves supplementation and sometimes substitution, depending on the caregiver's previous use of support groups. The computer network leads to greater use of support groups for those who were not initially attending support groups. Among caregivers who were participating in support groups early in the study, however, the effect of the computer network is to reduce their attendance at support groups as the study progresses. The two different processes are interpreted in terms of the predispositions, abilities, and needs of the caregiver for support services.

Predictors of depression in caregivers of Alzheimer's patients.

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The goal of this study was to evaluate a predictive model of depression for use with informal caregivers of Alzheimer's patients. It was hypothesized that in addition to the usual stressors associated with the demands of caring for a dementia patient, sociocultural factors such as caregivers' perceived normative expectations to assume and maintain the caregiving role might add to the level of caregiving distress. Specifically, it was hypothesized that as the normative expectation to provide care increased, depression would decrease. Using data from 572 caregivers of Alzheimer's patients in Michigan, 10 predictors were evaluated using OLS regression: length of caregiving, education, race, problematic behaviors, elder's health, supportive services, elder's verbal ability, elder's ADL/IADL, and perceived social expectations to provide care. Depression was assessed using the depression subscale of the CES-D. Only elder's verbal ability failed to contribute significantly to the model. Although significant, the relationship between expectation to care and depression was not in the hypothesized direction, suggesting important differences between depression and other measures of distress such as burden. Also, length of caregiving was negatively related to depression, suggesting either the acquisition of more effective coping skills with time or reduced heterogeneity in the sample.

Ways of Coping in Family Caregiver Wives vs. Daughters

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Family caregivers of a person with dementia are faced with taxing demands on a regular basis. Although the literature has examined caregiver coping in general, few studies have explored the differences in coping between wife and daughter caregivers.

Sixty women family caregivers (X age = 64 ± 10 years) were administered the Revised Ways of Coping Checklist as part of a larger health improvement study. The women were stratified by relationship to the care recipient (wife vs. daughter). As expected, the two groups differed significantly with regard to age (X = 69 ± 8 vs. X = 57 ± 5 years, respectively; $p < .0001$). The groups were similarly educated (X for both = 15 ± 3 years).

Significant differences were found on three of the eight subscales, with daughters endorsing each subscale more than wives. In thinking about their own caregiving situation, daughters were more likely to blame themselves or feel responsible for their situation ($p < .003$), blame others for their situation ($p < .01$), and were more likely to use problem-focused coping strategies compared to wives ($p < .02$). In contrast, no differences between the two groups were found on more general measures of psychological functioning (anger, anxiety, depression, and burden).

The results suggest that daughters may express more situation-specific negative responses to the stress of caregiving than wives. Daughters' use of more problem-focused coping strategies may be an indicator of a generational effect, between daughters and wives. Further research on coping in subpopulations of caregivers is warranted in order to tailor efficacious interventions for this important, at-risk segment of older adults. [Supported by PHS grant #AG-12358]

MEASURING AND EXPLAINING CAREGIVERS' PERCEPTIONS OF DEMENTIA SEVERITY

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Because most caregiving studies rely on caregiver report to characterize the person with dementia, caregivers' perceptions of dementia severity are of considerable interest. To examine this phenomenon, we asked 136 caregivers to rate on a visual analog scale (VAS) the dementia severity of the persons they were caring for and compared the ratings to clinicians' ratings using the Clinical Dementia Rating Scale (CDR). While cross tabulation showed significant correlation between the two ratings (Spearman $r = .44$, $p < .001$), 40% of the ratings were off-diagonal; nearly 75% of the deviations were due to higher (more severe) ratings by caregivers than by clinicians. Cognitive and functional status explained 60% of the variance in CDR ratings but only 31% of the variance in VAS ratings. An additional 4% of VAS variance was accounted for by behavioral symptoms. Caregiver demographic and situational characteristics were not related to VAS ratings. Kruskal-Wallis tests of mean rank differences on 7 measures of caregiver burden showed a consistent positive pattern of association between burden and VAS scores that could not be duplicated using CDR scores. We conclude that caregiver perceptions of dementia severity are closely related to the amount of burden they find in caregiving and that more work is needed to understand how caregivers form their perceptions of dementia severity.

RECEIVING COMMUNICATION FROM PERSONS WITH DEMENTIA

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PROBLEM/PURPOSE. Although persons with dementia are losing their cognitive ability, they have needs, preferences and desires that need to be expressed; however, communication from the person with dementia is often disregarded as meaningless. The purpose of this study was to examine communication episodes from persons with dementia for content and meaning. The sample for this study was taken from a larger study of interventions for persons with dementia and consisted of 20 data transcripts of baseline pre-intervention interviews between nurse researchers and persons with dementia. Qualitative methods using content analysis were used to analyze the data. Eighteen themes of meaningful communication data were found in the 20 data transcripts. Themes include laughter (100%), positive statements regarding family caregiver (85%), aware of cognitive limitations (75%), repetitive speech and positive statements about their past (70%), humor and the need to be useful (60%), spirituality (50%), positive statements about parents (45%), positive statements about the interview (35%), awareness of physical limits and concerns about death (25%), negative statements about family caregiver (20%), loss, paranoia, and feelings of being wrong (10%), feeling of being a burden and a concern for the future (5%). This study is an important link in establishing that persons with dementia do communicate in meaningful ways. In addition, it will aid in the understanding of communication from persons with dementia in order to identify their needs, and thus, build better models of care for the dementia client.

CAREGIVING STRESSORS IN END-STAGE DEMENTIA AND TERMINAL CANCER.

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While family caregiving is widely studied, there has been little research focus on caregiving during the final months of life. The purpose of this study was to examine caregivers of patients with either terminal lung cancer or dementia who were receiving hospice services. Caregivers were asked questions dealing with the patient's health and functional status, their own physical health, psychological and stress factors, and social support resources. The results showed that caregiving stressors are quite different in the two conditions. On average, dementia caregivers had been taking care of their spouse for an average of 54.5 months and spent 66 hours per week caregiving. Conversely, the lung cancer caregivers spent 120.8 hours per week caregiving, but this had on average only been for 10.5 months. Physical functioning was significantly higher in the lung cancer group, but these patients also experienced significantly more pain, nausea, depression, and loss of appetite. Caregiver depression was higher among those caring for patients with lung cancer, and whose patients had high levels of pain or depression. Results suggest that hospice and other programs aimed at caregivers should take these varied stressors into account.

THE STABILITY OF CAREGIVING HASSLES OVER A FIVE MONTH PERIOD

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Despite our reliance on transactional process models (e.g., Lazarus & Folkman, 1984) to study caregiving stress, relatively little research has tested several of the basic tenets of such models. One such tenet is that individuals' appraisals of events evolve and change over time. The purpose of this research was to examine the stability of caregivers' appraisals of daily caregiving events as stressful (i.e., daily hassles) over a five month period. Caregivers to 97 spouses who had been diagnosed with dementia completed the Caregiving Hassles Scale (Kinney & Stephens, 1989) monthly for six consecutive months. Dementia Rating Scales (Mattis, 1983) administered to care-recipients at months 1 and 5 indicated increased levels of cognitive impairment ($p < .01$). Nonetheless, repeated measures analysis of variance failed to reveal significant changes in total hassles as a function of time. With respect to specific domains of caregiving hassles, analyses also revealed relative stability in caregivers' reports of hassles stemming from assisting their spouses with basic and instrumental activities of daily living and hassles stemming from caregivers' social networks. In contrast, over time caregivers reported increased hassles deriving from their spouses' behavior ($p < .05$) and cognitive status ($p < .05$).

(This research was supported by NIA (AG09265).)

EVALUATION OF A FAMILY CAREGIVER INTERVENTION IN A RESIDENTIAL ALZHEIMER'S FACILITY

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Family caregivers often face continued stress, perceptions of burden, and depression even after their family members have been institutionalized. A Caregiver Intervention Project (CIP) was developed at Asbury Place (a 40-bed residential Alzheimer's facility) to support family caregivers during the stressful transition from informal to formal care and to lessen their burden and depression. The CIP focused on five areas: a caregiver needs assessment, a resource/referral system, a caregiver support group, specialized educational programs and a peer support group.

A CIP process evaluation was conducted to assess the benefits and obstacles to project implementation. The evaluation was based on staff interviews, an analysis of the intervention records, and three interviews with 36 family caregivers over a 12-month period. Key issues identified were: the importance of continuity with a single care coordinator, the value of the expertise of a social worker, and the presence of an effective non-confrontational communication system. Cost versus benefits of the CIP will be discussed.

THE CONTRIBUTION OF PERSONALITY TO THE PHYSICAL AND MENTAL HEALTH OF CAREGIVERS.

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The adverse physical and mental health outcomes associated with providing care for a spouse with dementia have been well documented. Although predictors of these outcomes have been identified, much of the variability in caregiver health outcomes is still not well understood. The role of personality in the caregiver stress process has recently begun to receive more attention. In the present study, a model of the caregiver stress process that was based on previous personality and caregiving research was tested with a sample of spouse caregivers ($N = 233$). Mental health and physical health were regressed on age, personality (indicated by neuroticism), social support, perceived burden, and health behaviors. Results indicate that mental health was strongly predicted by personality and perceived burden, while physical health was predicted by personality and health behaviors. Results indicate that personality factors play an important role in the caregiving stress process, and have implications for the identification of caregivers who may benefit from intervention.

CAREGIVER'S DECISIONS FOR ALZHEIMER'S PATIENTS

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The purpose of this study was to provide the foundation for interventions directed at supporting the decisions of caregivers of Alzheimer's patients by first documenting the progression of decisions such as cessation of driving priviledges, assigning guardianship, and relocation to an institution relative to the course of the disease and its diagnose, and second statistically predicting caregivers needs to make decisions based on patients' cognitive functioning. The design was a retrospective study using predominantly correlational and regression analyses of extant data collected in the Memory Disorders Clinic at the University of Kentucky Medical Center and maintained by the Alzheimer's Disease Research Center. Over 750 patient records provided data on measures including MMSE, ADLs, IADLs, and caregiver's perceptions of cognitive and behavioral problem frequency and reactions to problems. Analyses linked measures of patients' cognitive functioning to major decisions made by caregivers for patients. Findings from this research contribute to the design and implementation of a decision support system for service providers who guide caregivers in making appropriate and timely decisions.

CAREGIVING FOR A RELATIVE WITH ALZHEIMER'S DISEASE: ASSESSMENT OF A TRAINING PROGRAM AND CAREGIVER CELLULAR IMMUNITY

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The literature has been consistent in identifying the challenges faced by families as well the lack of knowledge and skills when caring for a relative with Alzheimer's disease. Depressive symptoms, decreased physical health and altered immune function in caregivers of Alzheimer's patients have been extensively documented as a result of caregiving. The purpose of this pilot study was to help caregivers to identify and deal with disruptive behaviors in their relatives. A total of 23 family caregivers of persons with Alzheimer's disease participated in a five-week group training intervention which was followed by a seven-week, individualized telephone follow-up program. Outcome variables included care-receiver behaviors, caregiver distress and caregiver immune function. Outcomes revealed that care-receivers' behaviors, overall, remained stable. Significant improvement in caregiver depression scores was found from baseline to 3 months later. Moreover, caregiver cellular mediated immunity, as measured by the delayed type hypersensitivity skin test, was stable over time. Caregivers also reported that they developed better skills as well as more effective ways of coping.

DO BEHAVIORAL DISTURBANCES IN PERSONS WITH ALZHEIMER'S DISEASE (AD) PREDICT CAREGIVER DEPRESSION OVER TIME?

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Cross sectional studies have shown an association between behavioral disturbances in persons with AD and depressive symptoms in their family caregivers. This longitudinal study, conducted through the Rush Institute for Healthy Aging, examined the association between agitated and aggressive behavior in persons with AD and change in caregivers' depressive symptoms. Ninety adult day care clients and their primary family caregivers were assessed at 2-month intervals over 12-18 months, yielding an average follow-up period of 11 months. Random effects models were used to characterize individual patterns of depressive symptoms over follow-up. Results revealed substantial individual variability both in overall level of depressive symptoms and in rates of change. Both baseline and time-varying (concurrent) behavioral disturbances in persons with AD were associated with higher average levels of caregiver depressive symptoms during follow-up. Care recipient level of cognitive impairment and caregiver characteristics (age and spousal relationship) were not associated with more depressive symptoms, but the amount of care provided weekly by the caregiver did have a significant, though modest, effect. Neither baseline level of depressive symptoms nor amount of behavioral disturbances was associated with rate of change in depressive symptoms over time. These data suggest that baseline behavioral disturbances are a good predictor of caregiver depressive symptoms over a 1-1.5 year period. Supported by U01 AG 10315

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FAMILY CAREGIVING AND IMPLICIT DECISION MAKING

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Families provide the majority of caregiving to the elderly, with the most common family caregiving dyad being that of mother and daughter. As elderly women are faced with health-related decisions, they often turn to family members for support and assistance in making those decisions. Families, however, usually do not have explicit discussions about caregiving preferences. In this study, 25 independent, community-dwelling older mothers (65+) and their daughters were interviewed regarding how they would go about making caregiving decisions in the future. All the mothers indicated that they would involve their daughter in the decision-making process. However, the vast majority (78 99%) indicated that they had not had, nor did they feel a need to have, explicit discussions regarding caregiving preferences. These mothers and daughters reported that the daughter would "know" the mother's preferences because either the daughter: (a) knew the mother so well; or, (b) had observed the mother providing care to an earlier generation. This building up of knowledge over the course of many years reflects an implicit decision making style. Of particular importance is the assumption that future discussions are unnecessary because the daughter already knows the mother's desires. The lifespan perspective helps to provide an understanding for the process through which knowledge about the other is developed and the consequences that such, often faulty, beliefs have on the decision making process.

JOBS AND PARENT CARE: IS EMPLOYMENT STATUS TOO SIMPLE A MEASURE?

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Despite a growing research literature, the relationship between employment status and involvement in parent care remains enigmatic. This qualitative analysis focuses on how 149 pairs of siblings (150 sisters, 148 brothers) with parents aged 75+ talked about their own and their siblings' jobs in relation to how filial responsibilities were met in their families. Respondents evaluated the impact of employment status of each sibling relative to the other(s). Results of analysis point to the value of moving beyond the individual to conceptualize people in actual relationships in both families and jobs. Holding a job competed with meeting filial obligations primarily because of the location of the job and the amount of time it required. It bolstered it by providing income and benefits specific to the job, useful knowledge and skills acquired for or on the job, and access to knowledgeable network members. Many jobs included flexibility, invisible because it was informal. Proportion of siblings employed and the way siblings' jobs meshed were important in how competitive jobs were. Focusing exclusively on employment status of daughters and sons rather than on the positive and negative aspects of actual jobs within groups of siblings hampers delineating the complex relationship between jobs and parent care. Finding measures that conceptualize people as network members will improve the explanatory power of gerontological research.

PHYSICIAN SUPPORT FOR CAREGIVERS IS LIMITED

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Unpaid family caregivers of impaired elderly have been called "hidden patients" of the physicians who care for aged with cognitive or physical defects. Although the Council on Scientific Affairs of the American Medical Association has appealed to physicians of the elderly to attend to the needs of their primary caregivers, there has been little evidence of the extent to which this has actually occurred. In this context, the caregiver's perception of the support received is the critical variable rather than the physician's assessment of the support given. In the project reported here, data were secured on the evaluations of 152 caregivers concerning the amount of support received from their care-recipient's physician. Perceived support was measured in four domains. Information about the elder provided by the elder's physician, and physician assurance about the appropriateness of the caregiver's performance, were viewed as direct support. On the other hand, indirect support included respectful treatment of the elderly patient as well as involvment of the caregiver in decisions about care modalities for that patient. On each support scale, at least two-thirds of the caregivers perceived they received less than optimum help from their care-recipients' physicians. Similarly, in an overall assessment of the support received from their aged relative's physician, at least a third gave a negative view. Lack of support was occasionally due to the absence of any doctor for the elderly care receivers, or to care provided by rotating physicians in emergency rooms or the Veteran's Administration. The effect of inadequate support on the physical and emotional health of the caregivers is discussed.

A DYADIC APPROACH TO EXAMINING DEPRESSION OVER TIME AMONG SPOUSES OF DISABLED ELDERS.

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The body of literature concerning the impact of disability on both the disabled adult and their spouse continues to grow, but very few include data from both partners. In this investigation, both elders with vision loss and their spouses were interviewed, to better understand the factors associated with the non-disabled partner's depressive symptoms over time.

The data for these analyses were drawn from a larger action/demonstration project, funded by the AARP Andrus Foundation, evaluating a family-based model of vision rehabilitation services. Elders with vision impairment and a primary family member were interviewed at baseline and after receiving vision rehabilitation services at The Lighthouse. Of the 74 elder and family pairs, 22 spousal dyads had both baseline and Time 2 interviews. At baseline, 27% of non-disabled spouses demonstrated a depressive symptomatology, as indicated by scores above 16 on the CES-D. Correlation coefficients of baseline and Time 2 depressive symptoms of the non-disabled spouse were calculated.

In terms of a stress process model, a typical pattern of caregiver well-being arose. Correlates of baseline depressive symptoms included the objective primary stressors of elder's ADL disability, depressive symptoms, and their perception of family overprotectiveness. Significant subjective primary stressors were the non-disabled spouse's attitudes toward vision loss and appraisals of their caregiving situation. These same factors emerged at Time 2 with the addition of the spouse's self-efficacy, representing a secondary stressor. The surfacing of this secondary strain is hypothesized to be the result of the accumulation of primary stressors and the caregiving situation.

BALANCING PARENT CARE WITH OTHER ROLES: INTERROLE CONFLICT OF ADULT DAUGHTER CAREGIVERS

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This study examined conflict occurring between the parent care role and three other roles (mother, wife, employee) of 278 daughter caregivers. One aim was to identify characteristics of women whose parent care role conflicted with any of their other roles. A second aim was to examine the mediating effects of interrole conflict (limits on time and energy imposed by two roles) in the association between parent care stress and well-being (depression, leisure activity restriction). Parent care stress was assessed as the stress of the parent's behavior problems (behavioral stress) and the stress of providing IADL assistance (instrumental stress). About 60% of women reported conflict between parent care and one other role. These women, on average, had parents with more functional and cognitive limitations, had lower socioeconomic status, older children, and had been married longer than women not reporting conflict between parent care and other roles. Path analyses indicated that interrole conflict mediated the relationship between behavioral stress and depression and between instrumental stress and leisure activity restriction.

Effects of Adult Care giver Mental and Emotional Status on Quality of Care to the Elderly

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Little research has been conducted on the effects of adult care givers' mental status and emotional status on quality of care (Godkin et al, 1989). The purpose of this study was to examine care giver cognitive status and emotional disturbance as predictors of compromised care to elderly recipients. It was hypothesized that poor conflict mediation and physically abusive behavior would be predicted by poor mental status and emotional dysfunction. Data was collected on 27 adult caregivers from the local community. A modified and expanded Neurobehavioral Cognitive Status Examination (Kiernan, et al., 1987) was used to screen multiple cognitive dimensions. Participants were asked to report feelings of depression and anger, measured by the Center for Epidemiological Studies Depression Scale (Radloff, 1977) and the State Trait Anger Scale (Speilberger et al., 1983). Physical neglect and verbal abusiveness were assessed using a Modified Conflict Tactics Scale (Cameron et al., 1993). Pearson's correlations and multiple regression analyses revealed physical injury and conflict mediation were significantly predicted by cognitive status and anger in care givers. These findings support a relationship between mentation and quality of care.

ELDER-PROXY AGREEMENT CONCERNING THE ELDER'S FUNCTIONAL STATUS AND MEDICAL HISTORY: THE IMPACT OF CAREGIVER BURDEN AND DEPRESSIVE SYMPTOMATOLOGY

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The purpose of this study is to examine the influence of caregiver burden and depressive symptomatology on elder-proxy response concordance for elder's functional status and medical history. 340 matched pairs of community-dwelling frail elderly persons aged 65 and over and their respective caregivers were interviewed regarding functional status and medical history. Elder-proxy concordance is highest among ADL items, followed by medical history items and IADL items. Caregiver depressive symptomotology had no significant impact on elder-proxy response concordance on any of the three outcomes of interest: IADL and medical history bias and ADL disagreement. Caregiver burden, however, was marginally predictive of bias on the total ADL and IADL scales. Additionally, increased burden was significantly predictive of bias on five of the seven individual items of the IADL scale suggesting that the more burden a caregiver feels, the greater likelihood that s/he will overstate the elder's disability compared to the elder's self-report. These findings suggest that clinicians and researchers who use proxy reports to determine treatment regimens and complete data collection efforts may do so with confidence on ADL individual items and medical history items when the elders' frailty is marginal. Caregiver burden, however, may result in misleading representation of the elders' functional status, specifically among IADL items.

COMPARING BURDENED/DEPRESSED CAREGIVERS WITH BURDENED NON-DEPRESSED CAREGIVERS

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Informal caregivers' subjective sense of burden ("overload") is strongly related to depression, but all burdened caregivers do not experience depressive symptoms. In this study we examined, both qualitatively and quantitatively, what factors distinguished between overloaded/depressed caregivers and overloaded/non-depressed caregivers. Qualitative analysis indicated that, compared to overloaded/depressed caregivers, overloaded/non-depressed caregivers more frequently reported positive relationships with care recipients and a recent easing up of the care situation. They were less likely to have health concerns of their own, to experience worry in other areas, and to feel responsible for elder care. Quantitative analysis indicated several additional differences. Overloaded/depressed caregivers reported worse health than their overloaded but non-depressed counterparts ($p < .05$). They also reported lower levels of emotional support from family and friends ($p < .05$), worse self-esteem ($p < .05$), and stronger threats to mastery ($p < .001$). Results suggest conditions under which burdened caregivers might be at-risk for more serious symptomatology or protected from such.

LEVELS OF SOCIAL INVOLVEMENT FOR CAREER AND PRIOR CAREGIVERS: A LONGITUDINAL STUDY

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Our previous research has found that caregiving women do not reduce their levels of social involvement, and for some groups we found caregiving associated with higher social activity levels. These findings run counter to the notion that caregivers suffer a "loss of self" in the caregiving role. Several explanations offered to explain caregivers levels of social involvement include caregivers use of outside activities as a source of relief from their caregiving responsibilities, caregiving may be of limited duration and episodic, or those more likely to be involved in a numerous assortment of activities are more apt to have the resources required to complete the caregiver role. This study uses the longitudinal information provided in the 1987/88 and the 1994/96 National Survey of Families and Households on 3,299 women aged 35 to 75, with information in both surveys, to test these explanations. Of the sample, 667 women report a caregiving experience in the 1987/88 survey. Of these caregivers, 320 women provided care at the first survey, but not at the second survey. These women are called *prior caregivers.* Another 347 women report caregiving at both interview dates, and are considered to be *career caregivers* Measures of change in activities levels for Family-Centered, Formal Activities, and Casual Activities between survey dates are constructed and activity levels differences between non-caregiver, prior caregivers and career caregivers are analyzed. Additional analysis examines the impact that providing care to different care-recipients at each interview for career caregivers has on activity levels. Implications of extended caregiving on social activity is discussed.

AGING CAREGIVERS AND ADULTS WITH DEVELOPMENTAL DISABILITIES: NEEDS AND PREFERENCES.

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Because of the increased life expectancy of people with developmental disabilities, the role of parental/ familial caregiver now frequently extends into the retirement years. This study investigated issues and concerns of familial caregivers aged 55 or older currently caring for a developmentally disabled child or sibling at home. In-depth interviews conducted with parents and/or siblings of 37 adults with developmental disabilities explored current support service utilization, satisfaction, and need; the physical environment of the home as it supported or impeded caregivers and care recipients; desired residential options for the future; and supports desired while transitioning from the family home to a community residence. Older caregivers reported substantial unmet support needs including respite care, home health aides, dental care, transportation, day programming and recreation opportunities for the care recipient. Most rated their current support services as somewhat inadequate. Over half of the care recipients were currently on waiting lists for residential services. When discussing the setting for future care, most caregivers felt a group home would best meet the care recipients needs. Desired residential characteristics included a safe and residential neighborhood, a one-level dwelling with a yard, private bedrooms, 24-hour supervision, proximate to both family and day programming, and shared with 3-5 peers. Additional support needs and desires for current and future residential options will also be discussed.

IMPLEMENTATION ISSUES OF A HEALTH EDUCATION PROGRAM FOR ELDERLY CAREGIVERS IN A HEALTH MAINTENANCE ORGANIZATION.

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The issues that arise in implementing an education intervention program for elderly caregivers in a health maintenance organization (HMO) are discussed. This presentation will highlight (1) strategies for recruitment of elderly participants in an HMO, (2) tracking and retention of participants throughout the project, (3) logistical planning issues when working with an HMO, and (4) practical development and training with regard to a Health Education Program (HEP) for spouse caregivers and frail elderly care recipients. In addition, a 90-page HEP manual will be introduced. The HEP is a multi-component small-groups program for spouse caregivers that includes problem solving, education, coping strategies, and support with regard to caregiving for chronically ill spouses. HEP is designed to be delivered by a trained group leader in 8 weekly 2 hour group sessions, with 10 monthly 2 hour follow-up topic sessions. Topics covered include medication management, nutrition, communication issues, safe home environments, and other areas that are important for caregivers. (Funded by the Agency for Health Care Policy and Research).

PREDICTORS OF PRIMARY CAREGIVERS' ASSISTANCE BY SECONDARY HELPERS: THE IMPORTANCE OF GENDER IN DIFFERENT TASK DOMAINS

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Studies of the gender/relationship effect on the division of labor have either suffered from small sample size or a lack of comprehensive sets of control variables. The present analysis is based on 6 NIH-funded studies (N=1387) with identical measures that provide statistical controls for: care demands, primary diagnosis, patient/caregiver health, education, income, employment, duration of care, living arrangements and household size. In this context, the study focuses on the assistance patterns to caregiver wives, husbands, daughters and sons in 3 task domains (ADL, IADL, mobility) classified as follows: (1) caregiver provides all assistance alone, (2) shares at least some tasks with secondary helpers (partial assistance), or (3) shares all tasks with secondary helpers (complete assistance). Given these outcomes, polytomous logit models are employed to obtain odds ratios for gender (female vs male) and relation (spouse vs child) comparing exclusive provision of care to partial or complete assistance. After adjusting for all variables in the model, it is shown that the odds of wives (vs. husbands) of being exclusive providers of ADL care are 4.77, those of daughters (vs. sons) are 2.66; in the domain of IADL tasks, the parallel odds ratios are 2.80 (wives/ husbands) and 2.99 (daughters/sons); in mobility assistance, these odds ratios are .43 (wives/husbands) and .94 (daughters/sons). Further results show that gender effects are task domain specific, vary depending on the relationship of caregiver to care-recipient, and are not as large as the effects of care demands, living arrangements or the duration of care.

DISTRESS AND SENSE OF COMPETENCE OF CAREGIVERS WITH MULTIPLE ROLES: A LONGITUDINAL STUDY ON MIDDLE-AGED DAUGHTERS PROVIDING PARENT CARE

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This study addresses the phenomenon of caregivers with multiple roles, also described as 'women-in-the-middle' or the 'sandwich generation'. OBJECTIVES The objectives were to investigate cross-sectionally whether (1) caregivers in complex role configurations have higher levels of distress and (2) feel less competent as caregivers. Longitudinal analyses indicated (3) whether the acquisition or loss of the caregiver role resulted in changes in levels of distress. The role conflict hypothesis was contrasted with the role expansion hypothesis. According to the role conflict hypothesis, multiple roles result in more distress, whereas the role expansion hypothesis assumes no such relationship. METHOD In 1994 and 1996 telephone surveys were carried out among the same group of respondents in the Netherlands. The sample was population-based and consisted of women aged 40-54 ($N_{1994}=934$, $N_{1996}=743$, RR=80%). Use was made of the Caregivers Competence scale ($\alpha=.86$) and the Langner Distress scale ($\alpha=.76$). Four roles were taken into consideration: the caregiver role, the mother role, the spouse role and the role of paid worker. RESULTS Cross-sectional analyses indicated that the number of roles was *not* negatively associated with the distress or sense of competence of caregivers. Distress and subjective competence of caregivers were predicted by care characteristics and the relationship with the care recipient. The longitudinal analyses showed that the acquisition or loss of the caregiver role resulted respectively in an increase or decrease of distress. Differences, however, were not statistically significant. CONCLUSIONS Limited empirical support was found for the role conflict hypothesis. Neither the occupancy of other roles nor the time spent on other roles had a negative impact on distress and the competence of caregivers. Perhaps social selection plays a role, with healthy and emotionally stable persons being more able to acquire and keep roles more easily.

Attachment Style and Relationship Quality in Caregiver Well-Being.

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Recent studies have underscored the importance of the quality of the caregiver-care recipient relationship in the prediction of caregiver well-being. However, there is a paucity of research on the ongoing attachment relationship with the mother, and on attachment patterns in older adults. The impact of attachment style and the quality of the caregiver- care recipient relationship on caregiver well-being was investigated in 118 middle-aged women providing care for their frail, elderly mothers. Daughters who were securely attached, and who reported positive memories of maternal care and lower levels of conflict in the current relationship, experienced less caregiver burden, depression, and stress, and higher satisfaction in comparison with daughters with insecure attachment styles. Secure attachment was significantly associated with positive memories of maternal care and low levels of conflict. Significant differences were found among the four attachment styles in the analysis of caregiver burden, depression, and stress. Securely attached caregivers had the highest levels of well-being, and fearfully attached caregivers had the lowest. In the analysis of sense of self and other, caregivers with a positive sense of other had significantly lower levels of burden, depression, and stress, as compared with caregivers with a negative sense of other.

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SOCIAL WITHDRAWAL VS. SOCIAL SUPPORT: RELATIVE EFFECTS ON PSYCHOLOGICAL WELL-BEING IN OLDER ADULTS

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A conceptual model (Williamson & Schulz, 1995) was employed to evaluate the impact of psychosocial factors (e.g., social support, social withdrawal) on relations between physical functioning and psychological health in older adults. This model proposes that social support accounts for significant variance in depressed affect beyond the effects of physical health status. However, the Life-Span Theory of Control (Heckhausen & Schulz, 1995) contends that social withdrawal may be adaptive as people age and experience deterioration in physical health. To evaluate those seemingly contradictory suggestions, the present study examined the relative effects of social support and social withdrawal on psychological well-being in older adults. Specifically, as part of longitudinal research on physical illness and depression in geriatric outpatients (n = 230), data were collected at 3 measurement points. Results indicated that, consistent with earlier findings (Williamson & Schulz, 1992), self-rated health predicted depressed affect beyond the effects of physician-rated health status. However, beyond the effects of physical health variables, social withdrawal explained little of variance in depression at each measurement point. However, controlling for the effects of physical health and social withdrawal, social support was an important contributor to depressed affect at all measurement points such that greater satisfaction with social contacts predicted lower levels of depressed affect. As suggested by activity theory (Havisghurst, 1963, 1968), the importance of satisfaction with social contacts observed in this study appears to emphasize the beneficial role of social participation in the psychological well-being of older adults.

AGENTIC AND COMMUNAL APPROACHES TO THE STUDY OF FRIENDSHIP IN LATER LIFE.

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The agentic-communal dimension of research has been treated as a dichotomy–quantitative research has been perceived to be agentic, and qualitative research has been perceived to be communal. This is too simplistic; the communal-agentic dimension can be treated as a continuum. Some survey research is more communal and less agentic than other survey research.

This paper reports on a meta-analysis of a data set with surveys of friendship among older adult as the unit of analysis. All 107 surveys of older adult friendship from which at least one journal article on the topic was published between 1960 and 1995 were included. On the average, 1.23 (SD=.65) articles had been published from each. A mean of 1.95 (SD=1.14) authors published from these studies, 1.07 (SD=.89) of whom were women and .83 (SD=1.05) of whom were men.

The communal end of the communal-agentic continuum is indicated by the inclusion of quotations from responses to open-ended questions, conducting a study focused entirely on friendship, asking questions about specific aspects of specific relationships. The agentic end, in contrast, is indicated by relying on close-ended questions, including friendship as a peripheral topic in a study on a less personal topic, and asking respondents to make general statements about their friendships.

Results show that the communal approach has become more prevalent over time. Also, the higher the proportion of the authors publishing from a study who are women, the more communal the approach. Implications of these findings for knowledge of older adult friendships are discussed.

EVALUATING THE QUALITY OF OLDER ADULTS' MOST SIGNIFICANT PERSONAL RELATIONSHIP: DEVELOPMENT OF THE PRIMARY RELATIONSHIP QUESTIONNAIRE

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Marital quality has been linked to physical and psychological outcomes in the elderly, but the likelihood of being married decreases dramatically as people age. In nonmarried older adults, the quality of their most significant interpersonal relationship may show a similar effect on health outcomes as marital satisfaction does in married couples. This study evaluated the reliability and validity of a 10-item measure that assessed the quality of older adults' most significant interpersonal relationship. The sample consisted of 89 community-dwelling older adults with a mean age of 70. The Primary Relationship Questionnaire (PRQ) showed good reliability. Correlations of the PRQ with measures of social support, marital quality, and health supported the PRQ's validity. Although married older adults had higher PRQ scores than nonmarried older adults, there were few group differences with regard to the PRQ's association with physical and psychological outcomes. The PRQ may be a useful tool in identifying older adults whose primary personal relationship puts them at risk for aversive physical and psychological outcomes.

ATTITUDES TOWARD PUBLIC AND PRIVATE POLICIES FOR FAMILY CARE

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Current research has examined the use of employer-based (private) and government-sponsored (public) family care assistance programs, but little is known about the characteristics of the individuals most likely to support these programs. Further, no research exists on the family characteristics and filial and parental responsibility norms that may influence these attitudes. This analysis used the 1997 "Survey on Intergenerational Linkages," a national random telephone survey of 1,500 individuals 18 and older, to examine factors related to endorsement of three types of family care policies: (1) financial compensation to family caregivers, (2) tax credits for family care, and (3) government-mandated unpaid leave for family care. Preliminary results indicated a positive relationship between being female, black, lower income, employed, and having a conflicted relationship with older parents, and endorsement of these policy options. Strong expressed filial and parental responsibility norms were also positively associated with support for caregiving policies. Given the changing dynamics of family life, the examined family care policies will gain increasing importance as families respond to the needs of ill and disabled family members.

ELDERLY PATIENTS AND ACCOMPANYING CAREGIVERS ON MEDICAL VISITS

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Recent research has noted that a considerable proportion of doctor-older patient encounters involve caregivers, resulting in physician-elderly patient (PT)-family caregiver (CG) triads. Family members may facilitate or hinder medical encounters and can assume a variety of roles in medical care decisions and visits. This study examined descriptions of the roles of family caregivers, comparing the responses of PT and CG, focusing on visits to outpatient clinics. Data were collected from 187 PTs (response rate above 85%) and 49 accompanying family CGs, if present (response rate 68%). Analysis focused on comparison of PT-CG responses. PT and CG agreed that 60% of the time PT made appointments to see the doctor. 42% of the time, CG gave a higher rating than PT to the importance of CG being present at the medical visit. PT and CG tended to agree that CG was present for helping PT explain symptoms or ensuring that doctor listened. CG much more highly evaluated contributions for providing emotional support and keeping PT company. Overall, CG evaluations of support were higher than PT views. As CGs become more involved in medical decisions and office visits with PTs, more information is needed about the impact of CG participation.

SOCIAL RESOURCES PREDICT QUALITY OF LIFE, DISABILITY AND PHYSICAL FUNCTIONING OVER TIME

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Social support has been shown to be an important predictor of functioning and disability for older adults with knee osteoarthritis (OA). Much work, however, has been cross-sectional or has neglected to investigate whether social integration is also important along with support. The purpose of the present study was to delineate the influence of baseline social resources (support and integration) on baseline and 18-month follow-up measures of quality of life, functioning, and disability. Data from a longitudinal clinical trial involving elders with knee OA compared two exercise intervention groups to a control group. Results of multiple regression analyses indicate that social resources are important factors in predicting depressive symptomotology, pain, physical functioning and activity level, after controlling for treatment group and baseline clinical status. Further, social support was a more consistent predictor than integration.

ANTECEDENTS AND OUTCOMES OF PERSONAL AND INTERPERSONAL AGENCY: NEW INSIGHTS ON ACHIEVING CONTROL, MASTERY, AND WELL-BEING.

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Although gerontologists have examined the separate roles of control and social support in achieving emotional well-being, there has been minimal research on the linkages between these constructs. We set out to address this issue by first identifying two strategies for achieving control: personal agency (PA) [i.e., attaining goals alone] and interpersonal agency (IA)[i.e., attaining goals cooperatively]. Then, with data from 450 community-dwelling adults (age range=18-98 yrs.), we tested a structural model in which PA and IA were thought to affect well-being indirectly via their direct effects on perceived mastery. Direct positive effects were hypothesized between social support and IA and between physical health and PA. Finally, age was presumed to have direct negative effects on both social support and health. Data analyses with EQS suggested a well-fitting model (GFI=.97, χ^2=50.452, df=10, $p < .05$, RMSEA=.095), after the addition of an unhypothesized direct negative path from age to mastery. The relevance of these findings for future theory and research regarding the effects of social support and control on emotional well-being will be discussed.

PATTERNS OF CO-MORBIDITY AND SOCIAL SUPPORT: IMPACTS ON CAREGIVER HEALTH

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A significant issue that has been relatively unaddressed in the literature on caregiving is the impact of multiple illnesses/co-morbidities of frail older adults on their caregivers. In a study of 86 caregivers of patients participating in a clinical trial of the effectiveness of geriatric assessment centers, we found that there were six co-morbidity patterns. Depending on type of co-morbidity, caregivers were more or less affected. When assessing the relationship between type of co-morbidity and caregiver burden, caregiver health, and caregiver social support networks, we found that while there appeared to be no association between multiple co-morbidities and patient or caregiver social support network type, there was an effect on the caregivers' perceived change in health over the last five years. All caregivers caring for patients with only chronic illnesses rated their health either much better (92%) or somewhat better (8%) over the last five years. Only caregivers caring for patients with multiple co-morbidities reported their health as somewhat worse over the last five years. Second, of those caregivers reporting no strain, the majority were caring for patients with only chronic illnesses. Severe strain is reported only by caregivers providing support to a patient who has a physical disability in addition to dementia or a chronic illness. Finally, this study also found that size and scope of a caregiver's social support network impacts their health. For example, the majority of caregivers receiving no help experienced moderate strain and felt their health was somewhat worse over the last five years.

ORGANIZATIONALLY DEVELOPED SUPPORT GROUPS FOR OLDER WOMEN-IMPACT ON AFFECT, SOCIAL SUPPORT AND SENSE OF CONTROL

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Various studies have investigated the impact of support group participation on an older adult's support network. The purpose of this present study was: to determine components of support network of older women participating in groups developed by the Supportive Older Women Network organization; to determine relationship between various social network components and incidence of depression , sense of well being and sense of mastery; and, to examine the benefit of participation in a staff run versus a peer run group. Women who were identified as socially isolated by another aging organization were used as a comparison group. Significant correlation occurred between subjective and structural network components and between subjective and functional components. Significance was determined for subjective components and race, having children and heath rating demographic variables. Significance was established for subjective components and depression. Analysis of mastery and demographic variables yielded significance for heath rating. Well being correlated with health rating, depression and subjective components of the network. Group leadership type analysis indicated significant differences in peer run versus comparison group and staff run versus comparison group but not between staff and peer run groups.

A LONGITUDINAL VIEW OF SOCIAL SUPPORT AMONG THE VERY OLD.

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Competing theories exist to describe social support across the life span. The continuity perspective articulates the relative stability and continuity of social support while the social problems approach describes the constriction of social support with advancing age due to retirement, relocation and death of friends and family. Recent research found stability for the most part in social support among the elderly. But when those over age 85 where examined their networks were reduced and they were less likely to get involved in social activities However, these results did not provide a longitudinal view of social support in very old age. The study reported here examined the stability of social support in a longitudinal study of elders age 85 to 98 at time 1. Subjects (n=23) were interviewed five times over a nine-year period between 1986-95. The original sample (n=193) was a convenience sample selected from non-institutional settings. Results show that health and function decline among these very old people over the 9-year period. During this same period, there was no significant change in any measure of social support with the exception of a significant decline in the number of people the subject knows well enough to visit. Overall, the findings support the continuity perspective since social support and social activities for the very old people remained relatively stable over 9 years. Continuity in social support might be viewed in a positive light, but when continuity exists in the face of declining health and function, it is perceived as problematic for the elder because they may not get the needed support(Research supported NIA AG05635).

SPOUSAL ASSISTANCE, SELF-EFFICACY, AND DEPRESSIVE SYMPTOMS IN OLDER WOMEN WITH OSTEOARTHRITIS.

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Osteoarthritis (OA) is a prevalent and often disabling chronic illness. Married older adults with OA often rely on their spouse for assistance with daily activities, but this assistance may not always be perceived as helpful by the patient. This study examined the effects of negative reactions to husbands' IADL assistance on self-efficacy and depressive symptoms of 98 older women with OA. It was predicted that greater negative reactions to spousal assistance would be related to more depressive symptoms, and that this relationship would be mediated by the patient's sense of efficacy in coping with arthritis. Analyses revealed that patients who felt that they had little choice over the amount and timing of assistance provided by the husband had more depressive symptoms, and this relationship was partially explained by a decreased sense of efficacy in coping with arthritis (controlling for disability). These findings illustrate the importance of assessing reactions to spousal assistance in understanding the consequences of such assistance for the patient's adjustment.

CHANGE IN OLDER ADULTS' SOCIAL CONTACT AND SUPPORT: THE CARDIOVASCULAR HEALTH STUDY.

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Although older adults' social relationships play a critical role in their adaptation to aging, little is known about the degree of change in the structure and function of these relationships over time. The present study utilized a population-based sample of approximately 5,000 older adults age 65 and older (the Cardiovascular Health Study) to examine individual change in frequency of contact with family and friends and availability of support across five yearly time points, as well as between-subject variability in this change. Hierarchical linear modeling analyses revealed that, on average, respondents experienced increased contact with family members and available belonging, appraisal, and tangible support over time. Furthermore, higher baseline levels of depressive symptomatology predicted individual variability in change for all outcomes but family contact, and higher levels of baseline functional disability predicted more of an increase in tangible support and less of an increase in family contact. These findings demonstrate that some social resources may be enhanced during older adulthood, but that there is a high degree of variability in these observed changes which can be predicted by mental and physical health indicators.

DEPRESSION IN THE SPOUSAL CAREGIVER FOLLOWING CARDIAC SURGERY

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The caregiving literature has discussed negative outcomes associated with providing care to frail and dependent elderly. However, little is known about the outcomes of providing care to those experiencing chronic illness. The purpose of the present study was to examine the relationships among contextual characteristics, stressors, social support, and depression in spouses who provided care for their husbands and wives following cardiac surgery. Measures of caregiver health, relational deprivation, global role strain, social support, and depression were administered to 50 spousal caregivers (77% female; mean age 61 ± 12 years) approximately 6-months postoperatively. Overall, 71% of the variance was explained by these variables taken together. Caregiver health and role strain had significant main effects, and social support moderated the association between relational deprivation and depression. Further, 25% of caregivers were clinically depressed compared to 2% expected in the general population among this age group. Another 14% had depressive symptomatology. Spousal caregivers are at risk for negative emotional outcomes associated with providing care following cardiac surgery.

SOCIAL SUPPORT AND ACTIVITY PREDICTORS OF OLDER ADULT HEALTH STATUS AND WELL-BEING.

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This study compared social support and activity to well-being in a sample of healthy older adults (N=275). Participants (mean age=72, 77% female, 54% married, and 98% white) completed the Social Support Inventory, the Baum Activity Checklist, the PGC Morale Scale and the mental and physical health scales of the SF-12. Regression analyses showed that high demand leisure activities and Nondirective Support predicted increased morale scores ($R^2=.21$, $p<.01$). Low demand leisure activities and Nondirective Support predicted increased mental health while Directive Support predicted decreased mental health status ($R^2=.12$, $p<.01$). Instrumental, social, and high demand leisure activities predicted increased physical health and low demand leisure activities predicted decreased physical health status ($R^2=.23$, $p<.01$). Nondirective Support predicts increased mental health, whereas Directive Support predicts decreased mental health. Low demand leisure activities predict increased mental health, but predict decreased physical health.

THE IMPACT OF SUPPORT RECEIVED AND SUPPORT BURDEN ON CHANGES IN PERCEIVED SOCIAL SUPPORT.

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Little is known about how exposure to different types of stressors affects the support process, especially among older adults. The support mobilization model argues that a person's exposure to a stressful event triggers support from those in the person's support network. In contrast, the deterioration model of social support argues that a stressful event deteriorates the perceived availability of social support. This study examines the impact of a broad-based acute stressor on the perceptions of social support. The study used a sample of 480 older respondents (aged 55+) who had varying levels of exposure to a flood. Measures of perceived social support were available pre and post flood. Findings revealed that perceived support at time 1 and flood exposure were both positively associated with flood-related support received and support burden. Support burden and support received were each, in turn, positively associated with increases in perceived support. There were no significant age interactions. Thus, even among the oldest age group, both provision and receipt of support increased the sense of available support.

THE DYNAMIC ROLE OF PERSONAL COPING STYLES ON PHYSICIAN CONTACTS.

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It is well-known that a large proportion of illness is preventable through modifiable lifestyle factors. It is hypothesized that unhealthy life styles would be related to increases in the formal health care utilization and the adoption of coping styles may reduce the usage of health care by moderating the courses of illnesses. Despite the buffering role of social support on utilization, less attention has been paid to explore individual's coping resources to moderate the development of illness. The main purpose of the study was to investigate the role of personal coping strategies on health care utilization. A sample of 7729 working individuals aged from 45 to 82 was drawn from the first wave of Health and Retirement Survey (HRS) to investigate how utilization is moderated through self-motivated coping efforts.

A set of hierarchical multiple regression model was ran. As was expected, a sizable amount of proportion in utilization was attributable to need factors. When unhealthy life styles (e.g., smoking and excessive drinking) and risk factors (e.g., depression, occupational stress, and work hazards) were added, they significantly contributed to the physician contact. When self-motivated personal coping behaviors (e.g., exercise, religious participation, and a medication regimen) were added to the final model, they tended to lessen need factors. However, heart conditions and exposure to occupational hazards still remained significant predictors of hospital utilization. The importance of addressing work safety and enhancing personal lifestyles were discussed. These important factors should be considered when predicting future health care utilization.

THE STRUCTURE OF SOCIAL SUPPORT NETWORKS OF OLDER BLACKS AND WHITES WITH CHRONIC ILLNESS.

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There is disagreement about the degree and frequency of social support received by older blacks in comparison to older whites, with some studies suggesting more and others less support provided by blacks' support networks. This paper explores racial differences in the structure of the support networks of older adults with chronic illness. The data come from a study of the health care management of adults 65 and over with at least one of four chronic illnesses in Allegheny County, PA. In a series of questions about support exchanges, 208 participants (102 white and 106 black) were asked about the people who provide them with instrumental, emotional, and informational support in general and with respect to their illnesses. Results indicate that the active support networks of the whites were larger than those of the blacks (mean 6.1 persons vs 5.3 for blacks; p=.035) and that whites had more potential help if needed, but the blacks' networks tended to have a greater proportion of extremely close ties (75.1% for blacks vs 66.8%; p=.001), to be in more frequent contact (90.3% at least weekly vs 82.3%; p<.001), and to be geographically closer (88.9% within a half hour drive vs 83.3%; p=.004). The whites' networks had a higher proportion of kin (67.4% vs 59.9%; p=.005), while the blacks' networks were more likely to be friends and others such as church members. There were no significant differences in the mean number of persons who provided instrumental (3.6 persons) and emotional (1.8 persons) support by race, although a greater proportion of the blacks' networks provided this support indicating a greater intensity of network use. These and other results showing the multidimensional nature of support networks and their somewhat different structure for these older blacks and whites will be discussed.

SOCIAL NETWORK INVOLVEMENT IN DAILY ACTIVITIES

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The benefits accrued to morbidity and mortality through social integration are a widely recognized component used to define overall health. Less well determined, however, are the mechanisms through which social functioning accrues benefits for health. Data from 158 adults aged 65 to 90 recruited to pilot a cognitive intervention trial were used to explore the involvement of others in individuals' activities of daily living. The majority of participants reported independence in their basic ADLs and little difficulty in performing instrumental ADLs. Despite this reported level of function, many participants did report assistance in performing IADLs. Nearly all (98%) reported having at least one individual on whom they rely, or could rely, when help is needed. As expected, ADL and IADL difficulty were positively associated with the number of network members providing instrumental and emotional support (r ranges from .15 to .32). Performance of IADLs, however, was unrelated to social integration. Multivariate analysis revealed that, controlling for perceived IADL difficulty, participants identifying a spouse as their primary helper reported more dependence in performing IADLs than did participants identifying a non-spouse primary helper. Also, gender contributed additional variance to IADL performance with men reporting greater dependence. Neither age nor race were significant predictors of IADL performance. These results demonstrate that having a spouse in one's network of available helpers is distinct from other network members for dependence in performing daily activities.

FUNCTIONAL SOCIAL SUPPORT AND LEVEL OF HEALTH IN WOMEN AGE 65 AND OLDER RECOVERING FROM HIP SURGERY

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Social support networks of elders play an important role in hip fracture recovery. The purpose of this study was to investigate the extent that functional characteristics of social support (informational, tangible, and emotional support and support provided to others) predicted level of health in this population of women. A cross-sectional study was conducted in which 73 women ($\bar{x}$ = 81 years) were interviewed in their residence several weeks ($\bar{x}$ =12 weeks) following injury using a modification of Krause's (1990) Inventory of Socially Supported Behaviors, OARS Instrumental and Physical Activities of Daily Living subscales, and survey questions. The findings indicated that pre-injury functional status (FS), time since injury, and informational support predicted post-injury FS. Informational support and support provided predicted perceived health. Two structural equation models of social integrity were tested using EQS. The best model included the variables of age, living arrangements, pre-injury FS, number of post-op complications, time since injury, support provided, informational and tangible support, perceived health and post-injury FS. Significant direct relationships were found among pre-injury FS, support provided, tangible support and perceived health ($p = < .05$); and pre-injury FS, informational support, tangible support and post-injury FS ($p = < .05$). A significant indirect relationship was found between time since injury and post-injury FS through informational support ($p = < .05$). The results indicate that functional social support strongly influences recovery. The development of strategies to maintain or enhance functional social support in hip fracture patients are needed.

LONELINESS, ISOLATION AND SOCIAL SUPPORT NETWORKS.

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This paper is the result of a research carried on comparatively on the social networks of two age groups, composed by 100 young women 18 to 25 and 100 aged women, 65 to 75,divided into two groups each, according to their level of education:) up to primary school 2) secondary school and over, in order to explore the conditions in which these social networks become supportive. Social isolation is differentiated from loneliness and related to social support.

Psychologists working in the area of Social Psychology interviewed these women. The instruments used are: M.I.S.S. (Hans Veiel), E.S.L.I., Attachment Style Questionnaire, and a qualitative questionnaire on the meaning and experiencing of loneliness.

The quantitative as well as the qualitative results are analyzed, in the perspective that loneliness and isolation vary according to the perception that the person has of her social network. The importance of the relation between social networks and frequency of effective contact is discussed. The various meanings of being alone are depicted, and the variations according to age and education are described.

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FROM DENVER TO CHIAPAS: AGING INTERNATIONAL

E.P. Stanford, San Diego State University, Center on Aging, 5500 Campanile Drive, San Diego, CA 92182-1872

Participants:

R. Ham-Chande (Colegio de la Frontera Norte) Crossborder Aging in an Era of Rapid Change.

E.P. Stanford (University Center on Aging, S.D.S.U.) When Traditional Eldercare Is Challenged by New Demands.

A. Karmi (University Center on Aging, S.D.S.U.) From Denver to Zacatecas: Expectations of Migration and Family Care.

L. Reyes (Instituto de Investigaciones Anthropologicas) All Expectations Are Not the Same: The Extreme Case, Chiapas.

Discussant:

B. Du Bois (University Center on Aging, S.D.S.U.)

In the U.S., concern is rising about the graying of Mexican-Americans, whose traditional caregivers must work outside the home. In Mexico, remittances are important for older adults left behind when family members migrate for work. This symposium reports findings from a bi-national project conducted by the S.D.S.U. Center on Aging and the Colegio de la Frontera Norte, of Tijuana, using focus groups and interviews with older adults of Mexican descent on both sides of the border. A major finding was the diversity among Mexican Americans, related in part to migration cohorts, and the even greater diversity within Mexico itself. Migrants were more likely to come from the poor rural villages of Zacatecas and Chiapas than from middle-class suburbs or border towns. In Chiapas, at the southern tip of Mexico, differences were marked between Zoque-speaking individuals of Indian ancestry and Spanish-speaking Mexicans. Stereotypes about a single pattern of eldercare and migration were severely challenged.

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OLDER ADULTS WITH DEVELOPMENTAL DISABILITIES: CHALLENGES AND OPPORTUNITIES FOR CONTINUED COMMUNITY LIVING.

E.F. Ansello, Virginia Center on Aging, Virginia Commonwealth Univ., Richmond, VA 23298-0229.

Participants:

H.L. Sterns (Institute for Life-Span Development and Gerontology, Univ. of Akron, Akron, OH 44325-4307) Later Life Planning: Work, Retirement, Personal Choices.

M.P. Janicki (NYSOMRDD, Albany, NY 12229) Community Care for Older Adults with Intellectual Disabilities with Dementia and Increasing Frailty.

E.F. Ansello (Virginia Center on Aging) Field-Testing a Model for Inter-System Cooperation in Aging with Developmental Disabilities.

J.A. Stone (Texas Dept. on Aging, c/o Aging/DD, 1548 Deer Lake Dr., Lexington, KY 40515) Integrating Supports for Aging Texans with DD and Their Older Family Caregivers.

The face of aging is changing as more adults with lifelong developmental disabilities (DD) are surviving to later life. Their meaningful community living is challenged by, among other things, their remarkable diversity in characteristics, the increasing age of their caregiving parents, and the newness of inter-system collaboration to prepare staffs and services. Simultaneously, gerontologists have opportunities to design and study supportive interventions and preparatory curricula to build the capacities of elders with DD, their caregiving parents, and personnel in the DD and aging networks. The symposium reports critical analyses of research projects to (1) prepare older adults with DD to plan for their lives after parental caregiving or day service programs, (2) strengthen the abilities of AAAs to assist elders with DD and dementia, and their aging caregivers, (3) field-test a model for inter-system collaboration between the DD and aging networks, and (4) implement statewide a comprehensive integrated service system to respond to growing old with lifelong disabilities.

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POST-REFORM COMMUNITY CARE IN THE UK: HOW FAR HAS THE NEW SYSTEM TACKLED THE OLD PROBLEMS

Bleddyn Davies, PSSRU at LSE and universities of Kent and Manchester, Cornwallis Building, University of Kent, Canterbury CT2 7NF, England

Bleddyn Davies and José-Luis Fernandez (PSSRU, LSE) Have the reform's targeting priorities been implemented, and what adjustments are now being advocated?

José-Luis Fernandez and Bleddyn Davies (PSSRU, LSE) Do services produce better impacts? Service productivities in post-reform care.

Linda Bauld and Roshini Mangalore (PSSRU, Canterbury) Do services respond better to support networks and caregiver circumstances?

Raphael Wittenberg and Linda Pickard (PSSRU, LSE) Macro-simulation-based projections of demand and supply and alternative financing mechanisms for the long-run.

Discussants

Vernon Greene (Maxwell School, Syracuse, NY 13244-1090)

Antony Warnes (School of Health Related Research, University of Sheffield, Community Sciences Centre, Northern General Hospital, Sheffied S5 7AU

Josh Wiener (Urban Institute, Washington DC, 20037)

The British community care reforms, implemented from 1993, were intended virtually to replace all arrangements of the old system and introduce radically different priorities. Public subsidy was to be concentrated on the 'neediest'. Caregivers were to receive support. Services were to produce better outcomes for the inputs. As the reform has progressed, there have been arguments for adjusting the priorities, and for developing policy to meet new concerns. The goals have become more ambitious with respect to caregiver benefits. There has been a new level of concern with how care is to be financed in the long-term, culminating in the establishment of a Royal Commission on the subject. The symposium will discuss the degree to which the principal reform priorities have been implemented and with what effects on who receives what and with what benefits. Symposium contributions will discuss (a) the extent of implementation of the reform's targeting priorities, and the defensibility of patterns of utilisation of publicly-brokered and tax-subsidised services, (b) the impacts of the service inputs on benefits of evaluative significance in relation to the need-related circumstances of those so impacted, (c) the degree to which the services are responsive to caregiver priorities and differences in social networks, and (d) the implications of projections for the discussion about the strategic policy choices between alternative methods of financing. The evidence about (a), (b), and (c) is primarily from a major government-funded before-after study of the effects of changes in community care based on cohorts of user/caregiver/care manager triads, analysed with the modelling and other repertoire of the production of welfare approach. Evidence for (d) is from a new 140-cell macro-simulation model

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PATHWAYS TO LIFE QUALITY: TRANSITIONS TO A CONTINUING CARE RETIREMENT COMMUNITY

J. Krout, Gerontology Institute, Ithaca College, Ithaca, NY 14850; P. Moen, Bronfenbrenner Life Course Center, Cornell University, Ithaca, NY 14853.

Participants:

P. Moen, M.A. Erickson (Bronfenbrenner Life Course Center, Cornell University), J. Krout (Gerontology Institute, Ithaca College) Decision-Making and Satisfaction with a Continuing Care Retirement Community.

P. Eshelman, G.W. Evans (Department of Design and Environmental Analysis, Cornell University) Reestablishing a Sense of Home.

J. Krout, J. Oggins (Gerontology Institute, Ithaca College) Patterns of Service Use in a Continuing Care Retirement Community.

E. Heisler, G. Evans (Departments of Human Development and Design and Environmental Analysis, Cornell University) Moving to a Continuing Care Retirement Community: Does Distance Moved Matter for Social Integration and Health?

E. Wethington (Departments of Human Development and Sociology, Cornell University) Perceived Support Through a Residential Transition in Later Life.

Discussant:

Margaret A. Perkinson (Washington University School of Medicine, 4444 Forest Park Blvd., St. Louis, MO 63108).

As life expectancy increases, more older adults are considering new forms of housing such as the continuing care retirement community (CCRC). However, little is known about the factors related to a successful transition to communal living. Pathways to Life Quality, a collaborative research project of Ithaca College and Cornell University, is a long-term study of residential change and adjustment in adults ages 60 and over. Papers in the symposium use panel data from a pilot study of 107 individuals interviewed before and after moving to a new CCRC (in 1995 and 1997). The symposium examines factors related to a number of important outcomes across the transition to the CCRC: satisfaction, a sense of home, service use, social integration, physical health, and social support. Discussion will focus on ways to promote successful residential transitions and directions for future project research using a larger data set including older adults in many different residential arrangements.

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MEN AND WOMEN IN MIDLIFE: THE IMPACT OF THE CAREGIVING CONTEXT ON PSYCHOLOGICAL WELL-BEING.

M. M. Seltzer, University of Wisconsin, Waisman Center, 1500 Highland Avenue, Madison, WI 53705.

Participants:

J. S. Greenberg & M. M. Seltzer (University of Wisconsin, Madison, WI 53706). The Impact in Midlife of Having an Adult Sibling with Disabilities.

Y. Pettee, M. M. Seltzer, J. S. Greenberg (University of Wisconsin, Madison, WI 53705) & F. Floyd, University of North Carolina at Chapel Hill 27599. Life-Course Impacts of Parenting an Adult Child with a Disability.

L. Li, M. M. Seltzer, & J. S. Greenberg, (University of Wisconsin, Madison, WI 53705.) Well-being of midlife women: The impact of the quality of their relationship with their aging parents.

Discussant:

R. Pruchno (Bradley University, Peoria, IL)

Although providing care in midlife to a relative with disabilities is increasingly recognized as a normative later-life experience, few studies have examined this phenomenon during the midlife years. Nevertheless, there is mounting evidence that midlife caregiving is common and has the potential to have significant effects on health, psychological well-being, and the maintenance of role relationships. Therefore, more focused attention on the effects of caregiving during midlife is warranted. In addition, we know relatively little about how broad contextual factors shape the caregiving experience and ultimately impact on the well-being of caregivers.

This symposium includes three studies of midlife adults caring for either an elderly parent, an adult sibling with a disability, or an adult son or daughter with a disability. The goal of the symposium is to describe the heterogeneity of caregiving experiences in midlife, and to identify how psychological processes and outcomes vary according to the larger caregiving context as defined by the generational relationship of the caregiver to the care-recipient and the nature of the disability.

All three papers are based on longitudinal studies of caregiving. These studies have all been informed by a life course perspective, seek to understand both the positive and negative impacts of caregiving, and aim to contribute to theory and practice.

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UNDERSTANDING AND MAINTAINING THE PERSON IN EARLY STAGE DEMENTIA.

P.B. Harris, Dept. of Sociology, John Carroll University, Cleveland, OH 44118

K. A. Smyth, University Alzheimer Center, Case Western Reserve University, Cleveland, OH 44106.

Participants:

S.C. Burgener, (College of Nursing, Indiana University, Indianapolis, IN) Predictors of Quality of Life Outcomes in Persons with Alzheimer's.

R. F. Young, (Department of Community Medicine, Wayne State University, Detroit, MI) The Subjective Experience of AD

K. A. Smyth, M.M.Neundorfer, D.Geldmacher, E.Koss, P.J. Whitehouse, (University Alzheimer Center, Cleveland) Deficit Identification by Self and Others in Persons with AD.

R. Yale, (Licensed Clinical Social Worker, San Francisco, CA). Support Groups for Persons with Early Stage Alzheimer's.

D. Morhardt & N. Johnson, (Northwestern Alzheimer's Disease Center, Chicago, IL) Effects of Memory Loss Support Groups for Persons with Early Stage Dementia.

P.B. Harris, (John Carroll University, Cleveland) Insider's Perspective: Defining and Preserving the Self in Dementia.

Discussants:

Murna Downs, Director, Centre for Social Research on Dementia, Department of Applied Social Science, University of Stirling, Stirling, Scotland

Stephen G. Post, Professor, Center for Biomedical Ethics, School of Medicine, Case Western Reserve University, Cleveland, OH.

Dementia research is moving beyond biomedicalization of AD with its focus on disease entity, to recognize the subjective experiences of those with dementia. This symposium examines various aspects of the person's experience in early stage dementia using both quantitative and qualitative methodologies, with the ultimate goal of developing more person-centered dementia care services. With a longitudinal design, one paper examines relationships between person-centered and external variables as predictors of QOL indicators. Using focus groups, another paper explores persons' perceptions of the meaning of disease, disclosure, and coping. A third paper through a battery of tests examines and compares identification of AD-related deficits by persons with AD and caregivers. Two papers explore clinical interventions with diagnosed individuals and caregivers; one a controlled study of early stage support groups examines their effect on emotional health and social functioning; the other using a pre-test /post-test design explores evidence of improved mood and coping abilities. The last paper through in-depth interviews focuses on issues of self and strategies for its preservation in dementia. Together these papers assist in furthering our understanding of persons with dementia and their needs in this emerging area of investigation.

Sponsored by the Alzheimer's Disease Interest Group.

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Barriers to Use of Formal and Informal Support By Caregivers of Persons With Dementia

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Service use among caregivers of persons with DAT varies across studies. Despite these differences, studies suggest that service utilization by families coping with AD is much lower than expected, given the demands of providing home based care. Estimates indicate that only 10% to 25% of families use any community services for the care of a demented relative. Low rates of service utilization have been attributed to difficulty in locating services, concerns about the cost of services, or attitudes about the role of families in providing care. Semi-structured interviews were completed with 174 urban and caregivers and 44 rural caregivers to explore the relationship between stage of dementia, cognitive and functional status, perceived need, use of formal and informal support, and barriers to receiving help. Caregivers were asked about 11 areas of need ranging from personal care and supervision to financial management and in home medical treatments. 21% of rural and 28% of urban caregivers report receiving no outside help at all. Areas of unmet need were similar for rural and urban caregivers, 60 % of the respondents indicated need for more help with personal care,56 % needed more help with recreation and socialization, 53 % indicated need for help with supervision. Caregivers of persons with mild DAT (CDR=1) had significantly more areas of unmet need than those with moderate and severe dementia (F=10.62,p<.0001). Major barriers included preference to provide care "myself" and concerns about the reaction of the person with AD, rather than lack of information about service providers or concerns about cost. A path model predicting formal service was also computed. The overall fit of the model was good (χ^2=18.39,p<0.14). Caregiver burden was not directly associated with cognitive impairment, burden was the result of decreased task performance and problem solving skills and disruptive behaviors The most interesting finding was that increased disruptive behavior was associated with decreased use of formal assistance (-.48).

Dementia Caregivers: Clinical Training Reduces Caregiving Impact. K.Hepburn, J. Tornatore, S. Ostwald. Department of Family Practice, U. of Minnesota, Minneapolis, MN 55414; U. of Texas Health Science Center, Houston, TX 77030.

It is well established that family caregivers of demented elders suffer from increased levels of burden and depression. This paper presents results from an NINR-sponsored randomized trial of the Minnesota Family Workshop, a psychoeducational program for caregivers of community-living dementia patients. Central to the curriculum of this 7-week, 14-hour program were a set of training objectives aimed at changing caregivers' perceptions about the disease, about the manageability of day-to-day life, and about their mastery of the caregiving role. These objectives were meant to establish a more clinical and strategic, less emotionally enmeshed caregiving style. Caregiving approaches based on the Allen cognitive functional levels encourage caregivers to tactically manage situations through structuring and communication techniques based on an understanding of the person's losses and remaining abilities. Regression analysis shows that decreased levels of enmeshment and monitoring (on the Phillips Beliefs about Caregiving scale) and participation in the training group significantly relate to lower levels of burden (F=5.69, p<.001 on Zarit) and depression (F=5.99, p<.001 on CES-D). These results suggest the profitability of intervening to strengthen caregivers' objective and subjective appraisals and to provide appropriate clinical training for the role they have undertaken.

THE EFFICACY OF A CAREGIVER RESOURCE PROGRAM IN A HEALTH MAINTENANCE ORGANIZATION

A. Scharlach, M.C. Runkle, L. Midanik, K. Soghikian, Kaiser Permanente, Division of Research, Oakland, CA 94611.

This study examined the impact of a caregiver resource program on the physical and psychological well-being and health care services utilization of a representative sample of 166 caregivers who were members of Kaiser Foundation Health Plan in Northern California. Based on random assignment, 89 caregivers received an individualized program of counseling, referral, and support for one year, while 77 caregivers comprised a control condition. Of a total of 443 treatments received by the 89 caregivers, 54% were considered by the participants to be effective. Analysis of change scores revealed that caregivers in the treatment group experienced a significantly greater reduction in role strain from baseline to follow-up than did those in the control group; however, no significant between-group differences were found with regard to self-rated health, depression, or other measures of physical or psychological well-being. Among caregivers who displayed physical health problems at baseline, those in the treatment group increased their utilization of Kaiser inpatient and outpatient health care services to a greater extent than did those in the control group. Among caregivers who were clinically depressed at baseline, those in the treatment group increased their utilization of outpatient psychiatric services and decreased their utilization of non-psychiatric services to a greater extent than did those in the control group. These findings are discussed in terms of their implications for the development of effective caregiver interventions in a managed care environment.

The Use of Health and Social Service Resources By Persons With Dementia R. Toseland, P. McCallion, T. Garstka. Ringel Institute of Gerontology, University at Albany, State University of NY, Albany, NY 12222. This presentation describes a three year research project funded by the Alzheimer's Disease and Related Disorders Foundation. The first aim of the research is to obtain a comprehensive picture of the use of health and social services by individuals with dementia and their family caregivers. This has been accomplished by recruiting a random sample of 600 family caregivers of community dwelling individuals with dementia from the New York State Alzheimer's Disease and Other Dementias Registry, and surveying them by telephone about their use of 34 social and health services. The second aim of the study is to build a model of the factors contributing to use of formal services by individuals with dementia and their family caregivers using the Anderson Behavioral Model. Regression analysis and structural equation modeling have been used to build and evaluate a model of service use. The third aim of the study is to evaluate the effectiveness of LINK, a program that enables Alzheimer's Association

Chapter staff to use Registry reports to help caregivers access formal services. The process of developing and implementing the study will be described, and the findings about service use will be presented.

A PLAN FOR COST-EFFECTIVE ANALYSIS OF INTERVENTIONS DESIGNED TO ENHANCE FAMILY CAREGIVING FOR ALZHEIMER'S DISEASE.

B. Harrow, Ph.D., D. Mahoney, Ph.D., S. Czaja, Ph.D., C. Eisdorfer, MD, Ph.D. NERI, 9 Galen Street, Watertown, MA 02172

We develop a plan for examining the cost-effectiveness of two interventions that are part of the NIA/NINR funded REACH (Resources for Enhancing Alzheimer's Caregiver Health) project, a six site controlled study examining the feasibility and outcomes of interventions designed to help Alzheimer's caregivers manage daily activities and stresses. The two intervention sites studied here have technology components. The first, in Miami, FL, is a therapeutic intervention based on a family therapy model augmented by computer/telephone technology; a Computer Telephone Integration System. The second, in Boston, MA, is an automated telecommunications system (Telephone-Linked Care for Alzheimer's Disease) which monitors caregiver stress levels, provides a voice-mail support network, expert advice; and a distraction conversation for care recipients. Outcomes of both interventions include measures of the caregiver's depression, burden and stress. Based on current literature including the recommendations of the Panel on Cost-Effectiveness in Health and Medicine, we have developed a protocol to account for all intervention related costs with the following features: 1) costs will be estimated from the society perspective; 2) the cost of all inputs will be included with the exception of research related costs, and 3) development costs will also be excluded. Successful caregiver interventions may never be implemented without evidence of their cost-effectiveness. Our cost analysis will allow us to examine the potential for non-labor intensive interventions to either contribute to more traditional behavioral interventions or stand alone in the support of Alzheimer's caregivers.

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USING COMPUTERS AND THE INTERNET TO IMPROVE THE PSYCHO SOCIAL WELL-BEING HEALTH AWARENESS AND LEISURABILITY OF THE ELDERLY

N.H. Smith, J.I. Barol, Institute on Aging, University of Pennsylvania Health System, 3615 Chestnut Street, Philadelphia, Pa. 19104.

This presentation seeks to educate participants about the ability of the elderly to adapt to new technology. Studies have shown that computer usage can bolster self-esteem and confidence. It can increase accessibility to health information and increase opportunity for socialization and leisure participation to those who are at risk of isolation. Computer training can change the attitudes of seniors toward the new technology. This presentation demonstrates the work being done at the UPHS Institute on Aging to teach seniors how to use computers and take advantage of a new information medium, the World Wide Web. The virtual senior community designed for and with the help of seniors, Turtle Springs, which gets over 15,000 accesses a week, will be presented along with a successful program including computer training classes, and one on one interventions with the internet. Focus group and survey results showing self reports of improved knowledge of leisure resources, improved socialization and improved feelings of positive self-esteem will be discussed in regards to clients taking the computer training class, one on one intervention and working on the web site.

GEROTECHNOLOGY: PROVIDING SERVICE 'ACCESS TO THE ELDERLY

Barbara J. Holt, West Virginia University Center on Aging, PO Box 9125, Morgantown, WV26506

The use of information technology to expand and enhance services for the elderly has been found to be particularly useful in a rural state with elders and caregivers isolated from traditional sources of assistance. This presentation relates the development of the Gerotechnology Program at the West Virginia University School of Medicine Center on Aging, a series of projects utilizing technology to benefit the isolated, rural elderly of the state. A demonstration will include: a) a centralized collection of information on resources available to assist in caregiving and independent living for the frail elderly; b) a decision model to assist the elderly and their caregivers in selecting long term care services; c) a discussion group to offer online peer support for caregivers who are unable to attend meetings or wish additional support, provided through a listserve and a chat room; d) a centralized web site for all CoA activities, including listings of programs, continuing education classes for seniors (with online registration), conference announcements (with online registration) and listings of gerontology courses taught at WVU; and e) a uniform assessment for professional use, accessed online by state agencies to establish a single method of service planning and to create a smoother process for moving through the long term care system.

AGE-BASED PUBLIC POLICY: PROVIDING COMPUTER-DIRECTED EDUCATION ON THE WORLD WIDE WEB

A. M. Abbott, University Alzheimer Center, Case Western Reserve University, Cleveland OH 44120, H. Tillipman and T. Heartley, Dept. of Sociology, Gerontology, and Anthropology, Miami University, Oxford, OH 45056

The debate between age-based and need-based public policy has fueled the publication of inaccurate statements in the media. This presentation reports on the use of a World Wide Web site as a new medium for targeting, accessing, and educating a broad audience about age-based public policy. The presentation utilizes the Social Security Education Project <http //www cas muohio edu/~security>, an on-line educational web site concerning Social Security, as a model in demonstrating the potential of this medium to educate a large national audience. During the past 16 months, the site has recorded more than 62,000 visitors, thus demonstrating the site's ability to reach a large audience. The presentation will detail the methods of implementing, maintaining, and evaluating a computer-directed educational web site. Site implementation issues are addressed by discussing the targeting of an audience, content design, and site implementation timetables. Maintenance issues are addressed in a discussion concerning the need for frequent content updates to maintain content reliability and validity. The issue of site evaluation is addressed by assessing 271 responses obtained from an audience feedback system. The presentation concludes by arguing that this medium is a legitimate means of providing public policy education, and that future improvements should involve an evolution from a computer-directed presentation to a computer-mediated presentation and integration into a community health information network.

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RESIDENCE AND SERVICE AWARENESS: DIFFERENCES IN USE OF FORMAL SERVICES BY COGNITIVELY IMPAIRED OLDER ADULTS.

Neale R. Chumbler, Center for Health Services Research; Marshfield Medical Research Foundation; 1000 N. Oak Ave.; Marshfield, WI 54449-5790; Cornelia Beck, and Marisue Cody, College of Nursing, University of Arkansas for Medical Sciences.

Using a probability-based cross-sectional sample of older (70+) residents of Arkansas, this study examines residence and service awareness differences in the use of four services: two home-based services (home-health and homemaker) and two community-based services (senior centers and special transportation). To achieve this probability based sample, random-digit dial methodology---with a proportional list of all valid telephone area codes and prefixes followed by random digits---was performed. Interviewers queried whether there was an individual $\geq$ 70 years of age living in the household; and, second, whether they had either a spouse or other family member that either lives with or stops by and checks in on them. If these two conditions were met, respondents were asked a telephone screener for cognitive impairment with demonstrated sensitivity and specificity (N=504; completion rate=73%). Rural respondents had a greater likelihood of using senior centers and home-health services, adjusting for other sociodemographic, social support, and health characteristics. Awareness of services was strongly correlated with use of home-health and community-based services. Contrary to past research, rural respondents had a greater awareness of home-health services, adjusting for other sociodemographic, social support, and health characteristics. The findings are discussed from a policy perspective to better coordinate appropriate services for older adults living in both rural and urban areas.

GETTING BY IN THE COMMUNITY: A STUDY OF ELDERLY PERSONS ELIGIBLE FOR MEDICAID WAIVER SERVICES BUT NOT RECEIVING THEM.

J. O'Keeffe, AARP Public Policy Institute, K. Liu, The Urban Institute, S. Long, The Urban Institute, M. Kerr, Connecticut Community Care, Inc. Prior research on Connecticut's home and community based care (HCBC) waiver program found that 25% of those who applied for assistance, and were determined to meet the nursing home level of care criteria, did not enroll in the program. Six months after assessment, 44% were still living outside of nursing homes. This study of 50 waiver program non-participants was undertaken to determine the feasibility of a larger longitudinal study to examine the health and functional outcomes of program non-participants, as well as the reasons for non-participation, and the amount of informal care and formal services being received from other sources (if any). Fifty in-depth interviews were conducted in-person and by phone. The interviews provided an in-depth understanding of how people are coping with their LTC needs in the absense of waiver services. The study found that many of the respondents were medically fragile and that RN and Home Health Aide services through Medicare's Home Health benefit were the most frequently provided formal service. Very little formal care was provided, with informal caregivers providing most assistance received. One of the reasons given for not participating in the waiver program was concern about the state's estate recovery program.

EXPEDITED SERVICE DELIVERY: INCREASING ACCESS TO HOME AND COMMUNITY BASED SERVICES (HCBS) FOR POOR ELDERLY PEOPLE

Kelley Macmillan, MSW, Rosemary Chapin, Ph.D. and Roxanne Rachlin, MHSA, School of Social Welfare, University of Kansas, Lawrence, KS 66045.

Poor elderly people who need immediate access to long term care services may be unnecessarily institutionalized due to the length of time (typically 45 days) states take to determine Medicaid eligibility for HCBS. The purpose of this study was to develop an expedited service delivery (ESD) process that bypasses the wait for the Medicaid determination and allows HCBS services to begin promptly after assessment with minimal financial risk to the state. Steps included 1) interviews with state Medicaid agency staff in those states identified as developing ESD systems; and 2) development and testing of a two page financial screening instrument that would allow case managers to decide whether a consumer is eligible for ESD at the time of initial assessment. The instrument was tested using a blind review process on a purposive sample of completed Medicaid HCBS applications (N=120), 10 from each region of one midwestern state. Approximately 69% (N=83) of the applicants were found eligible for ESD and none of these 83 applicants were subsequently found ineligible for Medicaid. The additional 31% (N=37) were screened out by the instrument on the basis of reported income/assets or complexity of eligibility determination. Findings indicate the instrument is accurate for determining which HCBS applicants could receive ESD pending final Medicaid determination. The results of the state interviews and instrument testing will be presented, and a model for providing ESD will be outlined. This research has significant implications for helping elderly people remain in their homes.

Funded in part by the Kansas Department on Aging.

THE IMPACT OF WORKPLACE CULTURE ON EMPLOYEE USE OF ELDER CARE WORK/LIFE BENEFITS.

D. Altenpohl, Intracorp, Philadelphia, PA 19192 & L.W. Kaye, Bryn Mawr College, Bryn Mawr, PA 19010.

Despite the significant toll of elder caregiving on employee stress and job satisfaction, utilization rates for company provided work/life benefits remain low. A study of 1,004 randomly sampled employees residing in the top 100 SMAs in the U.S. conducted for Intracorp by The Gallup Organization provides evidence of a close relationship between the quality of the corporate culture and elder caregiving employees' use of work/life benefits. Survey respondents included managerial and non-managerial employees the majority of whom were employed full-time. Elder caregiving responsibilities were carried by 20% of the sample. Elder caregivers exhibited the highest degrees of stress, work/life imbalance, and career dissatisfaction.

Results indicate that employees in supportive work environments used elder care work/life benefits more, were more satisfied with their jobs, and registered lower levels of stress in balancing work and elder care responsibilities. Managerial attitudes/behaviors was the most significant factor in defining workplace culture and employees' use of elder care benefits.

RURAL /URBAN DIFFERENCES IN NURSING FACILITY ADMISSIONS: DO COMMUNITY SERVICES MAKE A DIFFERENCE.

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There is increasing emphasis at state and the federal level to reduce inappropriate nursing facility admissions and provide better community support to keep elders in their homes. Therefore, it is important to examine the factors associated with what might be considered premature institutionalization.

Level of disability is often a primary measure used to indicate need for nursing facility care. Recent studies have shown that elders in rural areas tend to enter nursing facilities with lower levels of disability, or at higher functional levels, than their urban counterparts. It is often assumed that this is a consequence of rural areas having fewer in-home and community services and a narrower range of service options than urban areas, but this assumption has received little study.

This study examines the relationship between the availability and mixes of community services and the functional level at which older rural and urban women enter nursing facilities. Data on admissions and functional status are drawn from MDS+ data on persons entering nursing facilities in a midwestern state. Information on service mix and availability are from a study of health and supportive services by county conducted the same year. Findings suggest that community service availability and specific mixes of services vary in their effect on nursing facility admittance and that other factors must be considered in understanding nursing facility utilization patterns.

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CLINICAL CORRELATES, DRUG MANAGEMENT AND PROGNOSIS OF COPD IN LONG-TERM CARE

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There is a lack of evidence-based data on pharmacological management and related outcomes among elderly with COPD. We evaluated prevalence, clinical correlates, and treatment of COPD among elderly living in long-term care. Also, we estimated 1-year mortality and hospitalization rates and modeled independent predictors. We used the SAGE database, which includes data (collected with the Minimum Data Set) on residents admitted to ~1,500 facilities in 5 U.S. states, between 1992-1995. Of 328,654 total patients, 18% had COPD. Up to 27% of patients had 6+ diagnoses in addition to COPD, and on average they received 8.0±4.7 drugs. Specific drug treatment for COPD was received by 64% of patients (range: 55-71). Sympathomimetics were the drugs most commonly used (29%), followed by xanthines (20%), anticholinergic agents (14%) and steroids inhalants (8%). There were substantial age- and gender-related differences, as well as different patterns of use depending on comorbidity. One-year mortality was 37%, and 42% of patients were hospitalized in the same period. Risk was significantly increased for men (RR 1.20), individuals with more severe physical impairment (RR 1.19), with 6+ comorbid conditions (RR 1.13), receiving 5+ drugs (RR 1.23), and those taking 1+ specific COPD drug (RR 1.18). Elderly with COPD have a significant burden of disability and comorbidity. Rate of hospitalization is high, and long-term prognosis grim. The absence of pharmacologic treatment and less than optimal care is prevalent.

SIX-MONTH INCIDENCE AND RISK CORRELATES OF MDS-DRS DEPRESSION IN NURSING HOME RESIDENTS.

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Few studies have focused on incidence and risk correlates of depressive symptomology in nursing home residents. The MDS-Depression Rating Scale (MDS-DRS) is a validated depression screening instrument that utilizes seven items from version 2.0 of the Minimum Data Set (MDS). Using the MDS-DRS, the six-month incidence rate of MDS-DRS depression (DRS-D) among 28,194 nursing home residents in four states was 7.0%. Twenty four baseline conditions were associated with DRS-D over six months. The five most significant unadjusted predictors were items related to psychosocial well-being (p< = .001). Multivariate modeling of the baseline conditions identified eight variables (p< = .01) predictive of DRS-D: Daily pain (OR=6.4), conflict or criticism of staff (OR=2.3), socially inappropriate behavior (OR=2.0), wandering (OR=1.8), resident does not adjust to change (OR=1.8), female gender (OR=1.6), use of side rails (OR=1.5), and unstable condition (OR=1.5). The risk correlates of pain and female gender are consistent with the findings of previous research in this area. Some of the factors revealed in this study are potentially modifiable and thus our findings may contribute to efforts to decrease the incidence of depressive symptoms in frail elders.

PREDICTORS OF ASPIRATION PNEUMONIA IN NURSING HOME RESIDENTS

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Aspiration pneumonia is a major problem for the elderly leading to hospitalization, costly care, and death. The highest reported incidence is among the elderly who are in nursing homes or hospitalized. This study employs a cross-sectional research design utilizing 1994 Minimum Data Set (MDS) combined data from Maine, Mississippi, and New York (N=102,842) - 3% of the sample (3,118) has the diagnosis of pneumonia. The primary hypothesis was that pneumonia in nursing home residents is significantly associated with multiple factors primarily relating to tooth decay, tube feeding, dependence for feeding, and dysphagia. Logistic regression with the backwards elimination procedure was used to estimate the final model predicting aspiration pneumonia. Interaction terms were tested and had no effect. Suctioning, high case mix index, emphysema/asthma/COPD, presence of feeding tube, and congestive heart failure were the strongest predictors of pneumonia. It is suggested that these factors are associated with altered colonization of bacteria, aspiration, and/or reduced host resistance to aspirated material.

MAMMOGRAPHY IN THE ELDERLY NURSING HOME RESIDENTS

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Breast Cancer continues to be a leading cause of death in elderly women aged 65 and over. It has been recommended that all women should have mammography every 1-2 years beginning at age 40. We examined the frequency of mammograms in a 400 bed academically affiliated nursing home. Medical charts of 250 women were reviewed. Over a 2 yr. period 29 residents had received mammograms. Nine (31%) of the residents who received a mammogram had a previous history of breast cancer and mastectomy. Of the remaining 20 residents, 18 (62%) showed scattered calcifications. Two (6.8%) residents were noted to have nodules on the mammograms.
Further studies are required to determine why most elderly female nursing home residents do not receive mammograms and whether they would benefit from regular mammography examination.

CHANGE THROUGH INTERDISCIPLINARY CONTINUOUS QUALITY IMPROVEMENT (CQI) IN LONG TERM CARE FACILITIES (LTCF) - A 4 STEP MODEL.

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The formally trained University of Miami, Geriatric Interdisciplinary Faculty Team (GIFT), including a social worker, nurse, psychiatrist, physical therapist and geriatrician has initiated a structured 4 step training program for LTCF in interdisciplinary team techniques and (CQI) principles. Step 1 - Team development. Step 2 - Team function and maintenance. Step 3 - Key process variable interpretation and planning. Step 4 - Implementing change through Deming PDCA cycles. Teams have been trained at 2 major LTCF (500 beds and 250 beds). Analysis of pre-, post-course data indicates an improvement on team's knowledge of methodical team process and improvement. With tightening national emphasis requiring facilities to show improvement in organizational performance, methodical team training in CQI will assume increasing importance. Innovative approaches will be needed to ensure achievements of standards.

QUALITY OF CARE AND SATISFACTION IN NURSING HOMES: DO SURVEYS HELP?.

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Nursing homes are a place no one wants to be. Nonetheless, they play an essential role in our continuum of health care. Quality of care and how to measure it will thus be a continuing public policy concern. Additionally, customer satisfaction is a widely-accepted goal in health care settings. Even though nursing homes can rely on a 'captive' population, dedicated administrators are deeply concerned about both quality of care and customer satisfaction. We will describe how a large nursing home, in a semi-urban setting, devotes time, resources, and energy to survey its three constituencies (residents, families and staff) and then incorporates their feedback into process and procedural changes. Results of surveys of the three groups --residents (N of 21), staff (N= 49), families (N=56)--from four periods (February 1997/1998, September 1997/1998) are examined. Examples of common issues and useful solutions will be discussed. Many family members find it emotionally demanding to visit but are reassured by this kind of responsiveness to their views and opinions, potentially increasing frequency and enjoyment of visits, as well as maintaining family connectedness.

THE QUALITY OF NURSING HOME CARE IN TAIWAN

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Few researchers have focused on the quality of care in nursing homes in Taiwan. The purpose of this study was to investigate the quality of care in nursing home, as determined by residents' satisfaction of nursing home care and health outcomes of residents. 308 elderly residents were randomly selected from the registered nursing homes in Taiwan for the study. The structure questionnaires were used to interview the elderly residents and their health care providers. Results showed that the mean of Short Portable Mental Status Questionnaire (2.46±3.26) and the mean of Functional Independence Measure (49.69±30.70) were lower than the mean of residents in nursing homes in the US. The prevalence rate of body weight loss, pressure sore, fall, urinary tract infection, use of physical restrain, injury, stool impaction, hospitalization, and short time returning home were 3.0%, 13.0%, 12.0%, 28.0%, 25.0%, 13.0%, 14.0%, 15.0%, and 19.0% respectively. 67 out of 308 residents who were mental intact reported moderate satisfaction of nursing home care. The first two satisfied items of the nursing home care were (i) the staff welcome resident's family visit, (ii) the clean room and surrounding in the nursing home. The last two satisfied of nursing home care items were (i)the personal belongings disappeared in nursing home and (ii)the life was boring in the nursing home. The level of satisfaction of the nursing home care was significantly correlated with the number of registered nurse and nurse aide, and the length of stay.

UNCOVERING THE MEANING BEHIND NURSING HOME RESIDENT SATISFACTION SURVEY RESULTS

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Surveys that gauge satisfaction of nursing home residents rarely analyze their results in a way that unearths the truths that may lie behind numbers. Here we illustrate how thoughtful analysis can extract meaningful insights from such survey data; how different analytic methods can be used for that purpose. This research analyzed the results of a satisfaction survey of 15,435 residents in 580 nursing homes and derived significant information. First, the "very satisfied" residents are a nursing home's paramount constituents and are a key to the nursing home's success. Second, our Strategic Index made it clear that it is not necessarily those services which residents rate as superior or inferior that deserve urgent attention. Rather, a nursing home should take to heart those issues that residents really care about, but on which the facility's performance is mediocre. Third, although resident satisfaction only faintly correlates with a nursing home's fiscal performance, still, good quality turns out to be good business; i.e., if residents are highly satisfied, the nursing home enjoys good occupancy, healthy profits and good compliance scores on state inspection surveys. Conclusion: resident satisfaction surveys carry hidden messages that could be unlocked through imaginative statistical analysis.

QUALITY OF CARE IN NURSING HOME SPECIAL CARE UNITS FOR PERSONS WITH DEMENTIA

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Development of nursing home Special Care Units (SCUs) for persons with Alzheimer's disease and related dementias is increasing, yet research regarding their effectiveness has yielded mixed results. We examined factors associated with structure, process, and outcome quality of care in SCUs. Data were provided by four collaborative NIA sponsored studies on a cross-sectional sample of 1,340 residents from 129 NH-SCUs in the states of CA, KS, ME, MI, MN, NC, and WA. Higher scores on physical therapeutic environmental quality were associated with fewer number of beds ($p<0.05$), a lower percentage of patient care days paid by Medicaid ($p<0.01$), less dependence in ADL performance ($p<0.01$), and lower levels of cognitive impairment ($p<0.01$). Resident physical restraint was associated with greater dependence in ADL performance (OR=1.5, 95%CI=1.3, 1.7), greater levels of cognitive impairment (OR=1.2, 95%CI=1.0, 1.4), history of falling (OR=1.7, 95%CI=1.1, 2.7), and history of stroke (OR=2.8, 95%CI=1.1, 7.5). Severely disruptive behavior was more likely among residents with greater dependence in ADL function (OR=1.3, 95%CI=1.1, 1.6), taking anti-anxiety/ hypnotic medication (OR=4.3, 95%CI= 1.6, 10.3), in not-for-profit organizations (OR=3.5, 95%CI= 1.25, 10.0), but less likely among residents in units with high environmental quality scores (OR=0.4, 95%CI=0.1, 0.6) and units operating for at least 6 years (OR=0.3, 95%CI=0.1, 0.8). These results suggest that both resident-level and facility/unit-level characteristics are associated with quality of care in nursing home SCUs.

MEASURES OF DRUG USE FOR COMPUTERIZED CLAIMS DATA

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Computerized pharmacy claims files are an increasingly attractive source of resident specific drug data for regulators and researchers evaluating the clinical application and costs of drug use. The claims files generally contain resident specific data on the drug, prescribed dosage, quantity and number of days supplied. This paper reports findings from a study designed to evaluate the reliability of claims data as a measure of drug exposure and to develop and test algorithms to estimate average daily dose for three classes of psychoactive drugs: antipsychotics, antidepressants, and anxiolytics. Claims data were compared with drug administration data abstracted from resident charts for 692 nursing home residents randomly selected from three time periods spanning 1991 to 1994. Based on claims data, nearly half were on drugs. The number of residents in each time period ranged from 214 to 255 and represented 126 facilities. When data were pooled across time, agreement on exposure to drugs was high for each drug class, with Kappa ranging from .79 for anxiolytics to .95 for antipsychotics. The algorithm that credited a restricted amount of concurrent use of two or more drugs within the same class more closely approximated average daily dose calculated from the chart (r=.98, .95, and .79 for antipsychotics, antidepressants, and anxiolytics respectively. Differences between the algorithms and implications for use will be discussed.

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Drug Treatment for Persons with Severe Cognitive or Mental Disorders: A Medication Study of Public Conservatees

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Conservative is a highly intrusive intervention that restricts the civil liberties and autonomous decisions exercised by adults. California, where the present study was conducted, has two types of conservatorship: 1) Civil Commitment, for persons with severe mental disorders, authorizes placement in a locked treatment facility. 2) Probate is designed to protect individuals who are unable to manage their personal and/or financial affairs as a result of cognitive disorders. Because it is designed to treat persons with severe mental disorders, we would expect to find psychotropic drug treatment administered to persons placed under civil commitment conservatorship.

Conversely, we would expect that persons placed under probate, who typically are diagnosed with mental retardation or dementia, use substantially fewer psychotropic medications. Using a sample of public conservatees, this paper compares and contrasts medication orders in civil commitment conservatorship (n=1565) and probate conservatorship (n=566). In addition, medication orders are examined in a subsample of conservatees 70 years of age and older (n=623), most of whom reside in health facilities. Findings show that the vast majority of individual in civil commitment conservatorships (90%) are administered psychotropic medication. About one-third of those in probate also receive these medications. Policy implications are discussed in light of the 1987 Nursing Home Reform Act of the Omnibus Budget Reconciliation Act, which restricted the use of psychotropic drugs in nursing homes to highly circumscribed situations.

RIGHTS OF NURSING HOME RESIDENTS: POST ADMISSION

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To effectively function as an advocate for nursing home residents, professionals, family members, and residents themselves must be equipped with an understanding of resident rights, nursing home responsibilities and the range of available community resources. The purpose of this discussion is to present the rights of nursing home residents as provided in federal and state statutes (most notably the Nursing Home Reform Act - OBRA '87). Topics include the right to quality care, quality of life, transfer and discharge rules, and assessment and care planning. The discussion will also touch on advocacy services such as the Ombudsman Program and Community Legal Services and includes a section on "common complaints" and the legal and non-legal remedies available. The objective is for participants to obtain effective advocacy skills by becoming familiar with the protections available to residents.

PUBLIC PERCEPTIONS REGARDING QUALITY AND COSTS IN MICHIGAN NURSING HOMES.

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Curbing costs while maintaining quality in nursing homes represent two of the most serious issues facing state government. Future legislative efforts to this effect will be strongly dependent on public opinion and support. The purpose of this study was to ascertain views from Michigan residents regarding nursing home quality and the need for reform. It involved a statewide random telephone survey representative of the population (n=1336). Key findings indicated that half of the respondents viewed the quality of care in nursing homes negatively, with persons ages 40-49 particularly dissatisfied. These perceptions, however, were strongly tied to their views regarding the effectiveness of the state in ensuring good care. Only a small minority of respondents (6%) recognized that Medicaid was the primary funding source for nursing homes. Willingness to pay for nursing home reform via increasing sales tax was divided, although responses varied according to how the question was framed. Public opinion should be carefully considered in developing future nursing home reform.

Factors Associated with Permanent Transition from Independent Living to Nursing Home in a Life Care Community

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Objectives. The purpose of the study is to examine factors associated with permanent transition from independent living to nursing home within a life care community. **Methods**. The study population consists of 334 residents who were aged 75+and resided at independent living units from December 31, 1990 to December 31, 1993. Data were collected through interview and medical charts review. Proportional Hazards regression model was performed to analyze the relationship between permanent transition and a set of important independent variables while taking time into consideration. **Results**. After adjusting potential covariates, the results indicate that the risk factors associated with permanent transition to nursing home were increasing age (RR 3.2; 95%CI 1.47-6.84), being hospitalized (RR 1.3; 95%CI 1.01-1.75), having neurological disease (RR 1.7; 95%CI 1.13-2.66), hip fracture (RR 1.8; 95%CI 1.14-2.75), and depression (RR 2.30;95%CI 1.49-3.53). **Conclusion**. With better medical attention to neurological disease and depression, the permanent transition to nursing home may be delayed or postponed.

A SUPPORT PROGRAM FOR CERTIFIED NURSING ASSISTANTS.

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Given the intense and prolonged relationship between certified nursing assistants (CNAs) and nursing home residents, CNAs may be especially distressed when a resident is dying or has chosen not to continue life-sustaining treatment. The needs of CNAs when caring for dying residents however, have typically been overlooked. The purpose of the present study was to provide a supportive program in which CNAs could discuss their personal experiences of caring for dying elderly residents. Particular attention was focused on their thoughts and feelings when a resident has chosen not to continue life-sustaining treatment.

In the present study forty CNAs (in groups of eight) completed a short questionnaire and then took part in a series of five one-hour discussion sessions. Preliminary data indicate that CNAs often experience distress from their work. For example, 84% of CNAs reported "always feeling emotionally drained" and 63% stated they "always feel sad" when caring for dying residents.

Almost 50% of CNAs agreed that "it is more difficult to care for a resident who is dying because he/she is refusing treatment" however, no one stated that "they would rather not be assigned to a resident who is refusing treatment". While CNAs described their work as internally rewarding, they reported getting little external reward or encouragement for it. CNAs were positive about participating in this type of program. CNAs' evaluations of the program as well as implications for policy and practice will be discussed.

Funded by the Greenwall Foundation.

Roommate Clinic: Learning to Adjust and Cope with Living with a Roommate in a Nursing Home

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Elderly residents experience multiple losses previous to and following admission to a nursing home. Institutionalization can symbolize a loss of independence and choice. Residents usually must share a room with a stranger who typically has different patterns of living. Adjustment to living with a roommate can be stressful for residents on many levels.

A 514-bed academic nursing home initiated a program for roommates, in which participants are divided into two groups, with pairs of roommates separated. Group members were encouraged to share their experience and offer each other ways of coping with roommate challenges. Discussions focused on everyday problems and also the exploration of feelings around living with another resident.

Participants reported a greater ability to cope with everyday stressors and a deeper understanding of feelings around loss of independence. Having discovered their common concerns, group members felt an increased sense of empowerment. New coping strategies were also available to participants. The Roommate Clinic offers a practical, experiential method of improving life in the nursing home while enhancing resident coping skills.

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MULTI-USE INTERACTIVE DATABASE FOR ELDER RIGHTS: A TOOL FOR CONTINUOUS QUALITY IMPROVEMENT AND OUTCOMES MEASUREMENT FOR OMBUDSMEN

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In 1997, the Administration on Aging (AoA) released the annual Long Term Care Ombudsman Report for FY 1995 to Congress. This was the first comprehensive national report based on the new National Ombudsman Reporting System (NORS), developed by ombudsmen to provide national statistics and aid in management of state and local ombudsman systems. To enhance its accountability to federal and state funding sources, New Jersey's Ombudsman program worked with a consultant to develop a Windows-based multi-use interactive database which reflected the needs of its system, provided the information required in NORS/state reports, and could serve as a tool for continuous quality improvement and outcomes measurement. The project was developed in 3 phases: 1) analysis of program/staff needs, development of data input screens, and staff training; 2) design of interactive databases/reports, formulation of policies/procedures to facilitate data collection and improve performance; and 3) installation of an internal computer network. Since initiation, the system has promoted internal reorganization, optimized efficiency, and provided timely access to outcome data. This project demonstrates the application of an interactive database as an effective management tool and a means of evaluating outcomes of ombudsman interventions.

PREVALENCE OF ELDER ABUSE IN A COMMUNITY-BASED SAMPLE

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Elder abuse was first mentioned in the medical literature in 1975. Approximately 1 million cases of elder abuse are reported each year. The objective of the present study is to identify risk factors that are associated with elder abuse. We extended previous research by focusing on whether individuals who demonstrate abusive behavioral symptoms are more likely to be abused. Data for this study were collected using the Minimum Data Set for Home Care (MDS-HC) on a cross-sectional sample of 805 community-based individuals participating in the Michigan Home and Community Based Services Waiver for the Elderly and Disabled and the Care Management Program. Logistic regression was employed to determine the predictors of abuse. As previous studies have shown, cognition and gender are not significant predictors of abuse in our model. Significant predictors of abuse are demonstrated abusive behavior (OR=21.7, CI=[1.4,343.04]), alcohol abuse (OR=7.3, CI=[1.7,31.5]), having a psychiatric diagnosis (OR=4.7, CI=[1.8,12.4]), social isolation (OR=3.2, CI=[1.5,6.9]), and a brittle support system (OR=2.6, CI=[1.2,5.7]). These results may help target intervention efforts in the community to prevent elder abuse.

GENDER, RACE AND ABUSE: WHAT THE LONG TERM CARE OMBUDSMAN PROGRAM (LTCOP) DATABASE CAN TELL US.

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Beginning in 1996 a revised reporting form for the LTCOP, containing 133 complaint categories, was required of all states. Even though the form did not include resident demographics, 6 states that had joined in an effort to computerize their data using the same software agreed to ask ombudsmen to collect residents' gender and race. Researchers working with these states argued that the characteristics of those persons complaining (or being advocated for), even though not required, should be known. This poster displays data from 6 states that now use *OmTrak* software to analyze verified complaints. The 1,134 complaints of abuse, neglect, and financial exploitation represent 18.6% of all complaints lodged. Of these type complaints, minority residents are significantly more likely to be abused, neglected and exploited than caucasian residents. For example, whereas 12.9% of complaints lodged by or on behalf of caucasian women fall into these categories, these figures increase to 16% for caucasian males, 20.4% for minority females and 25.5% for minority males. This poster focuses on what is known by these states as they analyze their data by gender and race. The relevance of knowing the characteristics of residents is examined, using statistical analyses to illustrate implications for practice and policy.

SENIORS TARGETED BY FRAUD ME Otiniano, R Lorimor, E MacDonald, School of Public Health & Center on Aging of UT-HSC, Houston, Texas 77030. This study is an investigation of the frequency and types of fraud that were experienced by seniors attending seniors centers in Houston, Texas.

Two hundred seniors were surveyed at six selected seniors centers in Houston, Texas and asked to report the occurrence of fraud in the last year. The survey was composed of 20 items asking demographic information, questions related to specific types of fraud, and the preference for receive information of fraud.

Of the 200 seniors, 157 provided usable responses. Forty three seniors (27%) responded positively to being victims of fraud at least once in the past year. Although females (32%) reported fraud more frequently than males (21%) the difference was not significant (p=.15). Hispanic reported fraud in 48% of cases, African-American 35%, White 15% and Asian 10%. These differences in reporting of fraud by ethnicity were significant (p<.01). Examples of the type of fraud reported included notification of fake prizes (20%), paying for work around the house that was not done (8%), and false insurance and warranty coverage (5%). Fraud occurred in over one-quarter percent of the cases. Hispanic and African-American were substantial more likely to report fraud than Anglos or Asian.

FINANCIAL EXPLOITATION OF ELDERS: ANALYSIS OF RISK FACTORS FROM A COUNTY APS DATA.

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Numerous studies of elder maltreatment for the past two decades have increased our understanding of etiology or risk factors as well as victim and perpetrator characteristics in the cases of physical and psychological abuse and neglect of elders. However, further analyses are needed to determine predictors of financial exploitation of elders, which has been found to comprise 12 to 50% of all elder abuse reports. Based on data from the case files of the Adult Protective Services (APS) of Erie County, New York, we analyze differences and similarities between financial exploitation reports that were substantiated and thus required the APS interventions (n=158) and those that were either unsubstantiated, resolved immediately, or in need of non-APS services only (n=228). Multivariate logistic regression analysis shows that environmental hazard factors and the types of alleged perpetrators are significant predictors of the likelihood of substantiation and intervention. We then analyze internal heterogeneities within the substantiated group: 132 cases had problems of both financial exploitation by others and mismanagement by self, and 26 cases were identified as having financial mismanagement problems only. Multivariate analysis findings show that these two groups were not different in their sociodemographic characteristics, but they were significantly different with respect to their functional health, living arrangement, size of social support networks, and alcohol and other substance abuse problems. Implications for policy, practice, and future research are discussed.

MULTIDISCIPLINARY TRAINING ON NEW ELDER ABUSE LEGISLATION IN PENNSYLVANIA

R.W. Costen, K.A. Segrist, Office of Attorney General of PA representative

Pennsylvania has had some elder abuse and neglect cases go to court only to have a facility pay a relatively small fine. To address the issue of neglect of care dependent persons in nursing homes, personal care homes, adult day care facilities, MR/MH facilities, and other long term care facilities, the Office of Attorney General of Pennsylvania contracted with the Institute on Aging develop and implement statewide training to area agency on aging, ombudsman, police, other law enforcement personnel, coroners, and regulatory personnel. Curriculum about legislation, basics of adequate care, investigatory processes, role of the coroner, and role of the regulatory bodies were covered at 12 sites across the state for the 1400 people who attended the training. Evaluation of the training will be presented as well as the outcomes of the training experience (collaboratives, additional legislation, etc.)

Competence With Compassion: An Abuse Prevention Training Program for Direct Care Staff

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In long term care (LTC) settings, conflicts are a daily part of life. Often, these conflicts can lead to misunderstandings and frustration, which, if left unchecked, can lead to abuse or neglect of residents. LTC staff perform difficult and often disagreeable duties under stressful working conditions, and are often the targets of abuse themselves. CARIE's abuse prevention training curriculum for LTC staff addresses the sources of conflict in institutional settings that can precipitate mistreatment of residents and provide proactive solutions to combat the problem. Several hundred LTC staff participated in this training. Data from extensive pre/post-testing revealed improved staff ability to defuse conflict with residents, a reduction in resident aggression toward staff, and reduced amounts of self-reported abusive and neglectful behavior. These findings highlight the need for on-going abuse prevention training for all long term care staff.

FIRST RESPONDER EDUCATION: A VITAL LINK TO INCREASE ELDER MISTREATMENT REPORTING

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First responders (police, fire, EMS) encounter elder abuse during routine duties, but inadequate knowledge, training and resources may impede recognition and reporting. Collaboration to combat elder mistreatment in Northampton County, PA (pop. 252,393; 20% > 60 yrs.) by a community hospital, health bureau and geriatric education center led to a survey of first responders. Of 377 respondents, 37% agreed elder abuse is a significant problem with mean estimate of possible abuse cases seen in prior month of 1.1 each. However, in 1996, only 43 cases of suspected elder abuse were reported to the county. Only 20% felt their knowledge was sufficient to identify a case; 48% did not know where to report potential abuse. Only 52% were aware of aging services. Formalized reporting procedures existed in only 19% of represented departments. Self-rated level of knowledge correlated with years of service and police affiliation. Level of EMS certification, number of years as a paid vs. volunteer employee, and being an older adult family caregiver was associated with likelihood to report abuse. Established departmental reporting procedures correlated with knowing where to report abuse. Respondents reported a high level of interest in learning more about abuse and aging issues. This data is being used to develop a comprehensive education and awareness campaign directed toward first responders, health care providers and the community to increase formal abuse reporting and promote earlier use of community resources.

MENTAL HEALTH ISSUES AND SERVICE NEEDS AMONG PERPETRATORS OF ELDER ABUSE.

J. Berman, Ph.D., and A. Salamone, M.P.S. New York City Department for the Aging, 2 Lafayette Street, NYC, NY 10007.

Victims of mistreatment are often reluctant to actively reach out for help, and when they do, necessary services are often not available. Studies have emphasized mental health problems and service needs of elderly victims of abuse and neglect. However, service providers stress not only the needs of the victims, but also the mental health problems of the abusers. For this reason, research and crime victims program staff at the New York City Department for the Aging asked case workers to administer a specially designed instrument assessing mental health issues among perpetrators of elder abuse and neglect. This study examined the prevalence of abusers suffering from mental health problems, types of mental health disorders, and the degree to which abusers use the mental health service delivery system. Preliminary results indicate the presence of a mental health problem in the vast majority of cases in which the abuser is a family member. Moreover, abusers tend to suffer from a range of problems including substance abuse, mental illness, and dementia. Victims are more likely to reach out for assistance in cases where the abuser suffers from a substance abuse problem than a mental illness. Demographic profiles and study implications will be addressed.

GUARDIANSHIP AND LEGISLATIVE CHANGES IN FLORIDA: A COMPARISON OF COURT FILES IN HILLSBOROUGH AND PINELLAS COUNTIES.

S. L. Reynolds, Gerontology Department, University of South Florida, Tampa, FL. 33620-8100.

Guardianship in Florida periodically receives splashy media attention and consequent legislative action, but there have been few studies of it as an institution. This study reports on the analysis of a random sample of 200 open court files in Hillsborough (Tampa) and Pinellas (Clearwater - St.Petersburg) counties. Due to an extensive change in the guardianship laws in 1989, the years 1983 through 1996 were examined for evidence of changes in practice.

Data collected includes information on the characteristics of adults (age 18 and above) placed under guardianship (wards) during those years, including demographic, health and financial variables. Also collected are data on the guardians, and on various indications of compliance with legislated procedures and standards. Results indicate that public guardians are more prevalent than originally assumed. Court monitoring is more diligent and training for guardians is more stringent in Pinellas County than in Hillsborough County, probably as a result of higher public funding. In addition, the reports of the qualifying examination committee (those charged with evaluating the capacity of the proposed ward in FL) often present conflicting findings; court response to conflicting advice appears to err on the conservative side.

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FALL PREVENTION PROJECT FOR OLDER ADULTS BALANCE TESTING

One (18 minute)/Color videotape/1998
Produced for the Temple University Fall Prevention Project by Natural Art Films.

This videotape is geared for entry level professional students and health care professionals. Three balance tests, the Berg Balance Test, Timed Up and Go, and Multi-directional Reach Test, are explained and demonstrated. Two community dwelling older adults in their 70s and 80s perform each of the tests. The audience views actual and not rehearsed performance by these individuals. The videotape can be used as a teaching tape for health care individuals to learn to administer the tests. The videotape can also be used for inter-tester and intra-tester reliability.

Contact: R.A. Newton, PhD, Department of Physical Therapy, Temple University, 3307 North Broad Street Philadelphia, PA 19140

Funded by HRSA/Bureau of Health Professionals Grant No. 5 D37 AH00523-01

Medicare: Take Care Of It So It Can Take Care Of You!
One (33 minute)/Color videotape/1998.
Produced for the Minnesota Board on Aging, Arrowhead Area Agency on Aging and Southwest Area on Aging by John Kunz Consultation Services and Parthe' Productions, with funding by the Administration on Aging, Department of Health and Human Services.

This educational video tape for Medicare beneficiaries, family members, students and professionals includes the following three segments: Take Charge of Medicare Benefits to Eliminate Fraud and Abuse; Medicare Part A and B: Your Benefits and Responsibilities; and, Preventing and Reporting Fraud and Abuse. Using a documentary, live interview format, the video is designed to encourage and motivate older adults to pay closer attention to their medical paper work and access insurance counseling programs to resolve problems and report suspected fraud or abuse.

Contact: John Kunz, MS, Center for Continuing Education/Extension, University of Wisconsin - Superior
1800 Grand Avenue, Superior, WI 54880

She's Happier There: An Intergenerational Story About Elder Abuse

One (30 Minute) Colour Videotape/1996
Produced for The Ontario Network for the Prevention of Elder Abuse by Deveaux Balsin Productions.

This videotape was written for Youth between the ages of 12 and 16. It is the story of a grandmother's struggle for a life free of physical, financial and emotional abuse and the unexpected help she receives along the way from her granddaughter. The video will be of particular interest to students in schools, and those in university and college programs studying in the areas of gerontology, sociology, psychology, social work, nursing and religious studies. Professionals, community groups and advocacy groups will be able to use this video as a way of identifying and discussing the different types of elder abuse as well as possible solutions. Study guide included.

Contact: Elizabeth Podnieks, Ed.D., Ontario Network for the Prevention of Elder Abuse, 47 St. Clair Avenue West, #1102, Toronto, Ontario Canada, M4V 3A5

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The New Medicare: Confusion and Clarity, Research and Education

Organizer: N. E. Cutler, Widener University, Chester, PA.

Participants:

R.I. Stone (International Longevity Center, New York, NY 1022)

J.P. Firman (National Council on the Aging, Washington, DC 20024)

C.A. Holmes (The Seniors Research Group, Southfield, MI 48075)

Moderator: N.E. Cutler.

The 1997 Balanced Budget Act mandates the development of a broad range of new Medicare choices for older men and women. The legislative intent of these new options—including expanded HMOs, provider networks, and point of service plans as well as new Medical Savings Accounts linked to high-deductible "traditional" health insurance policies—is to give older consumers greater personal responsibility for the expenditure of their health care dollar, including both their Medicare benefit dollars and their own out-of-pocket dollars.

This new "Medicare+Choice" program is scheduled to become available to consumers in 1999, with a national public consumer education program campaign initiated by the Health Care Financing Administration during 1998. Policy analysts as well as consumer advocates have noted substantial confusion over the new Medicare policies, including: the degree to which older consumers are likely to understand their new financial exposure and responsibilities (funding for the mandated consumer education and consumer choice support is much lower than originally discussed in Congress); to the likelihood that the new policies can meet their intended gaol of health care cost savings (confusion over plan definition and consequent data comparability may inhibit research aimed at evaluating the effectiveness of the plans meeting their policy goals).

These considerations naturally lead to questions about the research, education, and evaluation roles that gerontologists should play in clarifying the overall situation. This symposium sponsored by the GSA Public Policy Committee will examine "The New Medicare" from the perspectives of: federal policy mandates and implementation; the challenge of health-finance consumer education; how the health insurance industry is likely to respond, and how systematic gerontological-policy research should and is being carried out and developed.

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NATHAN SHOCK CENTERS SYMPOSIUM: THE GENETICS & MOLECULAR BIOLOGY OF AGING

Co-Organizers J.F. Nelson, P. Rabinovitch., U of TX Health Science Center, San Antonio, TX ; U. of Washington, Seattle, WA

Participants

H. Warner (NIA) Introduction

R.A. Miller A. Jackson, C. Chrisp, V. Monnier, A. Galecki, D. Burke (U. Mich, Ann Arbor, MI) Genetics and Biomarker Validation in Aging Four-Way Cross Mice

S. Schriner, G.M. Martin (U. of Washington, Seattle, WA) DNA Damage and Aging in Transgenic Mice Overexpressing Catalase and S.O.D

C Sell (Allegheny University Health Science Ctr, Philadephia, PA) The Role of Phosphatidylinositol-3-Kinase in Cellular Senescence
N van Orsouw (Beth Israel Deaconess Medical Ctr & Harvard, Boston MA) Two-Dimensional Gene Scanning in the Identification of Aging and Longevity Genes
C A Walter (U TX Health Science Ctr, San Antonio, TX) Analysis of the Relationship Between Carcinoma and Lifespan in a Population of Transgenic Mice

The Nathan Shock Centers Symposium presents examples of research emanating from the 5 Nathan Shock Centers for Excellence in the Basic Biology of Aging Miller et al will discuss the usefulness of a reproducible population of genetically heterogeneous mice for testing hypotheses about linkages, genetic and non-genetic, among age-related changes in multiple biochemical and physiological outcomes Examples would include gene mapping studies for QTL affecting age-sensitive T cell subsets and collagen adduct formation, prediction of longevity using measures of T cell aging and weight gain trajectories, and initial data on genes that influence lifespan and terminal pathology in mice Schriner and Martin will present observations made using transgenic mice that overexpress catalase and superoxide dismutase These important elements of the cellular defense to reactive oxygen species are hypothesized to protect DNA from damage during aging Sell will present new data on the role of phosphatidylinositol-3-kinase in in vitro cellular senescence van Orsouw will present data demonstrating the usefulness of combining extensive PCR multiplexing and 2-D electrophoresis for accurate and efficient scanning of multiple genes in parallel for all possible mutational differences All possible heterozygous mutations and polymorphisms are easily identified by the appearance of 4 spots, rather than the one spot observed for homozygosity So far, the method has been applied to cancer susceptibility genes and to the mitochondrial genome to study mutational differences involved in disease and aging Walter will present data on a C3HeB/FeJ strain that overexpresses O6-Methylguanine-DNA methyltransferase (MGMT) in brain and liver MGMT is a DNA repair protein that acts in solo to remove highly mutagenic and carcinogenic alkyl groups from the O6-position of guanine Overexpression of MGMT correlates with a reduction in the frequency of spontaneous hepatocellular carcinoma This animal model is being used to determine if the reduced frequency of carcinoma correlates with changes in lifespan

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MANAGEMENT OF ATRIAL FIBRILLATION AND VENTRICULAR ARRHYTHMIAS AND PACEMAKERS IN THE ELDERLY

W.S. Aronow, Hebrew Hospital Home, 801 Co-op City Blvd., Bronx, NY 10475

Participants:

W.S. Aronow (Hebrew Hospital Home and Mount Sinai School of Medicine, New York, NY 10475) Management of Ventricular Arrhythmias

D.D. Tresch (Medical College of Wisconsin, Milwaukee, WI 53226) Management of Atrial Fibrillation

E. Lichtstein (Maimonides Medical Center and State University of New York, Downstate Medical Center, Brooklyn, NY 11219) Pacemakers

Discussant:

W.S. Aronow (Hebrew Hospital Home and Mount Sinai School of Medicine, New York, NY 10475)

Ventricular arrhythmias (VA) in older persons without heart disease should not be treated with antiarrhythmic drugs. Class I antiarrhythmic drugs and sotalol should not be used to treat VA in persons with heart disease. Amiodarone is effective in reducing complex VA in persons with heart disease but does not affect total mortality. Beta blockers should be used to treat complex VA in persons with heart disease if there are no contraindications to beta blockers. VA associated with heart failure should be treated with angiotensin-converting enzyme inhibitors and beta blockers. The automatic implantable cardioverter-defibrillator is recommended in persons who have life-threatening ventricular tachycardia or ventricular fibrillation. Control of the ventricular rate in older persons with atrial fibrillation by digoxin, verapamil, diltiazem, beta blockers, and amiodarone therapy will be discussed. Indications for emergency and elective cardioversion of atrial fibrillation and contraindications for cardioversion will be discussed. Nondrug therapies for atrial fibrillation will be discussed. The use of antiarrhythmic drugs to maintain sinus rhythm versus control of ventricular rate plus use of oral warfarin will be discussed. Indications for pacemaker implantation, types of pacemakers, and pacemaker follow-up will be discussed.

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LONGITUDINAL STUDIES OF THE IMPACT OF VISION ON FUNCTIONAL STATUS OF OLDER PERSONS

SK West, Dana Center for Preventive Ophthalmology,Johns Hopkins University Baltimore, MD 21205

Participants:

GSRubin, (Lions Vision ResearchCenter, johns Hopkins University, Baltimroe, MD 21205) The Impact of Changes in Visual Function on Disability: SEE Study

SM Freidman (Johns Hopkins University, Baltimorte, MD 21205) An alternative approach to modeling Fear of Falling.

SK West (Dana Center for Preventive Ophthalmology Johns Hopkins University, Baltimore, MD 21205) Impact on Functional Status of Incidence and Progression of Cataract: SEE Study

B. Munoz (Dana Center for Preventive Ophthalmology Johns Hopkins University, Baltimore, MD 21205) Visual Function Predicting Cataract Surgery in a Population of Elderly Americans: SEE Study

Discussants:

KJ Cuickshanks (Department of Ophthalmolgy, University of Wisconsin Madison, Madison, WI 53705)

C Owsley (Department of Ophthalmology, University of Alabama at Birminham, Birmingham, AL 35294)

Ocular morbidity and associated visual impairment is an important component of functional disability, and adverse outcomes such as fear of falling and falls. The leading cause of visual loss in older persons is cataract, for which a successful intervention exists. This symposium will present a comprehensive assessment of visual function in older persons and how loss of vision affects functional status and fear of falling. Further, the symposium will examine how cataract impacts function even at early stages, and the predictors of seeking cataract surgery.

THE IMPACT OF CHANGES IN VISUAL FUNCTION ON DISABILITY: The SEE STUDY G.S. Rubin, B. Muñoz, K. Bandeen-Roche, S.M. Friedman, S.K. West and the SEE Project Team, Johns Hopkins University School of Medicine, Baltimore, MD 21205

We previously reported that multiple measures of visual function were associated with difficulty over a wide range of everyday tasks. These associations were based on cross sectional data from the SEE study of 2,520 men and women between the ages of 65 and 85. This paper presents longitudinal data on 2-year changes in visual function and its association with changes in disability. Visual impairment was assessed with a battery of psychophysical tests administered to 2,240 participants who represented 95% of the survivors of the original SEE cohort. Disability was evaluated with questionnaires and performance-based tests of reading, face recognition, and mobility. Changes in multiple vision measures were independently associated with worsening of self-reported disability and measured performance. Of particular note, a 1-line drop in visual acuity was associated with a significant increase in self-perceived disability (O.R. = 1.6), worse reading performance (O.R. = 2.9), and a decline in face recognition accuracy (O.R = 1.8). A 1-line drop in contrast sensitivity was associated with significantly worse mobility (O.R. = 1.6). These data indicate that age-related changes in visual function are associated with increased disability and that visual acuity alone is not adequate to capture the impact of vision loss on people's ability to perform everyday tasks.

AN ALTERNATIVE APPROACH TO MODELING FEAR OF FALLING S.M. Friedman, MD; S.L. Zeger, PhD; G. Huang; S.K. West, PhD; G.S. Rubin, PhD; L.P.Fried, MD; Johns Hopkins University, Mason F. Lord Building Room E135, 4940 Eastern Ave, Baltimore, MD 21224

Individual risk factors (RF) for geriatric syndromes such as fear of falling (FOF) have been delineated previously, but these entities tend to be multifactorial in etiology, and the combinations of RFs associated with the highest risk have been less well studied. We have used CART (classification and regression trees) modeling to evaluate those at highest risk of FOF. The Salisbury Eye Evaluation project assessed function, vision, and fear of falling in 2520 community-dwelling adults aged 65 to 84. Overall, 20.4% of the population expressed fear of falling. By logistic regression, female gender (OR 1.55), white race (OR 1.57), arthritis (OR 1.58), stroke (OR 1.90), number of medications (OR1.10), knee (OR 0.97 per Kg) and hip (OR 0.96 per Kg) strength, foot pain (OR 1.44), visual fields (OR 1.02), and presence of psychiatric disturbance (OR 1.13) were significantly associated with a report of FOF. The strongest predictor using CART methodology was hip strength, with 32.5% of those with strength ≤14.4 Kg reporting fear, and 12.4% with hip strength >14.4 reporting fear. The combination of hip weakness and visual field loss was associated with particularly high risk, with 53.7% of those with hip strength ≤ 8.7 Kg and missing >7 points out of 81 on visual field testing reporting FOF. Conversely, the combination of hip strength ≥21 Kg and no history of stroke were associated with only 4.2% report of FOF. This methodology helps to identify individuals at highest risk for FOF, and the CART approach may be useful in evaluating risk for other multi-factorial syndromes, which are common in the elderly.

IMPACT ON FUNCTIONAL STATUS OF INCIDENCE AND PROGRESSION OF CATARACT: SEE STUDY. S.K. West, B. Munoz, D.D. Duncan, G.S. Rubin. Dana Center for Preventive Ophthalmology, Lions Low Vision Center, Applied Physics Laboratory, Johns Hopkins University, 600 N. Wolfe St. Baltimore, MD 21205

Severe cataract causes difficulty in daily tasks, as reported on the Activities of Daily Living Scale (ADVS); improvement in function occurs after cataract surgery. Little is known on the impact on function of the development of early cataract, and progression of existing cataract. In the Salisbury Eye Evaluation Project , baseline lens photographs documented cataract status of over 2110 adults age 65 to 84 who did not have bilateral cataract surgery. Functional status measures were administered and co-morbidities ascertained. Follow-up data were collected two years later. 110 new cases of nuclear and 120 cases of cortical opacities developed, and 44 cases of nuclear and 157 cases of cortical opacities progressed. No significant differences in ADVS score were observed between incident cases of lens opacities and cases without lens opacities. The progression of nuclear opacities was associated with a worsening in ADVS score over the two year interval, (loss of 4.4 points, p = .03) compared to those with nuclear opacity which did not progress. Progression of cortical opacity was not associated with a worsening of ADVS score. The functional impact appears to be distinct for progression of different cataract types.

VISUAL FUNCTION PREDICTING CATARACT SURGERY IN A POPULATION OF ELDERLY AMERICANS. THE SEE STUDY. B Muñoz, SK West, OD Schein, LP Fried, KB Roche, GS Rubin, and the SEE Team. Dana Center for Preventive Ophthalmology; Departments of Medicine and Biostatistics; Lions Low Vision Center; Johns Hopkins University, Baltimore MD.

The SEE project is a population-based study of 2520 persons aged 65 to 84 living in Salisbury, Maryland. At baseline, complete visual function evaluation using standardized procedures was performed; presence of nuclear, cortical, and PSC opacities was assessed based on the grading of lens photographs. An eye was defined as having opacity if nuclear grade≥2 or cortical area >1/8 or any PSC was present. Self reported visual function was ascertained using the ADVS questionnaire. At the follow-up exam all cataract surgeries between the two visits were identified. Among the 1815 individuals with bilateral phakic eyes at baseline that were re-examined two years later, 5.0%

had unilateral surgery and 1.6% had bilateral surgery. After controlling for age, gender, race, and visual acuity, eyes with mixed opacities and pure nuclear opacities were more likely to have surgery than were eyes with pure cortical: Hazard Ratio (95%CI) was 2.1 (1.0-4.5) for mixed and was 1.3 (0.7-2.5) for pure nuclear. Having seen an eye doctor before baseline also predicted surgery (3.2 (1.8-5.6)). The level of visual acuity was a more important predictor than self reported visual function (ADV score).

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PATIENT AND PHYSICIAN PERSPECTIVES AND CARE PRACTICES FOR HOSPITALIZED END STAGE ADULT CANCER PATIENTS: FINDINGS AND INSIGHTS ABOUT AGING AND CANCER FROM THE SUPPORT Project.

J.H. Rose, Departments of Medicine-Geriatrics & General Medical Sciences-Oncology, Case Western Reserve University (CWRU) 12200 Fairhill Rd. Cleveland, OH, 44120

Participants:

J. H. Rose, (Departments of Medicine-Geriatrics & General Medical Sciences-Oncology, CWRU) Age Differences in Patients' Preferences for Treatment and Decision Making Style.

E. E. O'Toole, (Departments of Biomedical Ethics & Medicine-Geriatrics, CWRU) Physicians' Decision Making Practices Regarding Resuscitation for Hospitalized Middle Aged and Older Cancer Patients.

N. V. Dawson, (Departments of Health Services Research & Epidemiology and Biostatistics, CWRU) Accuracy of Prognostic Predictions for Cancer Patients Vary by Patient Age and Physician Specialty.

C. Thomas, (Department of Health Services Research, MetroHealth Center, Cleveland, OH) Statistical Methods to Compare Physician Specialty Practices: Propensity and Case Matching.

Discussants:

Harvey J. Cohen, Duke University School of Medicine, VAMC, Durham, NC.

C. Seth Landefeld, University of California, San Francisco School of Medicine, San Francisco, CA.

Joanne Lynn, Center to Improve Care of the Dying, George Washington University, Washington, DC.

This symposium presents findings about perceptions and care of adult cancer patients who were enrolled in the Study to Understand Prognoses and Preferences for Outcomes and Risks for Treatment (SUPPORT), a prospective, multicenter research project that examined decision making and care practices for seriously ill hospitalized patients. SUPPORT included 3 disease categories which involved cancer (non-small cell lung cancer, colon cancer metastasized to the liver, and multiorgan system failure associated with malignancy). The average age of cancer patients in SUPPORT was 61 years; average life expectancy was estimated to be 6 months. SUPPORT assessed physicians' and patients' perceptions as well as physicians' care practices during hospitalization. This symposium will focus on findings about age differences in patients' preferences and their physicians' perspectives and decision making practices regarding aggressiveness of care. Physicians' prognostic estimates for patients' 2 and 6 month survival and associations between estimates and care practices will be discussed. Statistical methods used to compare physician specialties and age groups will be described. Similarities and differences in preferences and care practices between older adult and middle aged cancer patients will be highlighted.

AGE DIFFERENCES IN END STAGE CANCER PATIENTS' PREFERENCES FOR TREATMENT AND DECISION MAKING STYLE.

J.H. Rose, E.E. O'Toole, N.V. Dawson, C. Thomas. Case Western Reserve Univ. (CWRU), Cleveland, OH.

Cancer patients' preferences for treatment and decision making are key in providing end of life care. Using data from a 5 site prospective cohort study of seriously ill hospitalized adults (SUPPORT), we compared preferences of middle aged (45-64 yrs, M=57, SD=5.4) and older adult (≥65, M=72, SD=5.1) patients. In an interview approximately on the 3rd day of hospitalization, patients were asked, if they had to make a choice, whether they would prefer treatments to extend life or to relieve pain. In addition, patients were questioned about tolerance for adverse states (i.e., pain, attached to ventilator or respirator, fed by tube), decision making style (Krantz, 1980) and their perceived probability of surviving 2 and 6 months. Choice of treatment to extend life or to relieve pain was reported by 353 middle aged and 296 older adult patients. Age group comparisons were conducted controlling for cancer type (i.e., non-small cell lung, colon metastatic to liver, multiorgan system failure w/malignancy).

Forty-two percent of middle aged and 34% of older adult patients chose aggressive over palliative care (p = .08). Patients in both age groups who chose aggressive treatment also reported greater tolerance for adverse states and perceived a higher probability of surviving 2 and 6 months than those who chose palliation. There was an interaction between age group and treatment choice in patients' decision making style (p = .04). Among middle aged patients, those who chose aggressive treatment preferred less involvement in decision making, whereas, among older adults, patients who chose aggressive care wanted more involvement in decision making than those choosing palliation. SUPPORT prognostic model estimates for 2 month survival did not differ by age group according to treatment choice. Results highlight the importance of recognizing the individual preferences of middle aged and older cancer patients for end of life treatment and decision making.

PHYSICIANS' DECISION MAKING PRACTICES REGARDING RESUSCITATION FOR HOSPITALIZED MIDDLE AGED AND OLDER CANCER PATIENTS.

E.E. O'Toole, J.H. Rose, C. Thomas, N.V. Dawson. CWRU, Cleveland, OH.

Physicians' communication and decision making practices regarding resuscitation are fundamental to shared decision making at end of life. Using data from SUPPORT, we compared physicians' orders during hospitalization regarding resuscitation between middle aged (45 - 64 years, M = 57 SD = 5.4, n = 180) and older adult (≥65, M = 72, SD = 5.1, n = 264) cancer patients. We also compared age groups on whether patients with these orders had documented discussions about resuscitation. Finally, for patients/families who had a discussion, we compared middle aged and older adult groups in the timing of such discussions (i.e., hospital admission to first documented discussion) about resuscitation. Age group comparisons were conducted, controlling for cancer type (i.e., non-small cell lung cancer, colon cancer metastatic to liver, and multiorgan system failure associated w/malignancy) and severity of illness (i.e., SUPPORT prognostic model for 2 month survival).

Among patients with orders regarding resuscitation (N = 444), more older adult (92%) than middle aged (86%) cancer patients had do not resuscitate (DNR) orders (p = .03). For patients with DNR orders (n = 397), a similar percentage of older adult (81%) and middle aged (82%) patients had associated discussions. However, there was an age difference in timing of such discussions. The interval between hospital admission and discussion about resuscitation was shorter for older patients (M = 6.3 days) than for middle aged patients (M = 9.8 days) (p = .004). In contrast, there was no significant difference in the interval from DNR order to death between middle aged (M = 52 days) and older (M = 59 days) patient groups. Results raise questions about age differences in factors precipitating resuscitation discussions and decisions between older and middle aged end stage cancer patients.

ACCURACY OF PROGNOSTIC PREDICTIONS FOR CANCER PATIENTS VARY BY PATIENT AGE AND PHYSICIAN SPECIALTY. N.V. Dawson, J.H. Rose, C. Thomas, E.E. O'Toole. CWRU, Cleveland, OH

Physicians' perceptions of prognosis for survival are important in discussing and planning patient care. Using data from SUPPORT, we compared generalists' (Gen) and oncologists' (Onc) prognostic estimates of 2 month survival made for 1293 cancer patients in 3 age groups: 18-44, (YA), 45-64 (MA), ≥ 65 (OA). Patients whose attending physician was a Gen were matched with patients whose attending was an Onc based on patient characteristics that predicted their propensity to have an Onc as a attending. Total N = 538 (42%).

After matching on propensity score, patient characteristics were very similar. Gen and Onc demographic and training characteristics were comparable, both had similarly short relationships with these patients. Survival at 2 months did not differ between Onc and Gen patients 52% and 56% respectively, p = .27). Perceptions of prognosis varied by specialty: Onc were generally optimistic (bias = +.065). Gen tended to be pessimistic (bias = -.069) (P< .007 Onc vs. Gen). Overall accuracy, as determined by the mean probability score, favored Gen: (= .184) over Onc (= .205) (Z = 3.89, p < .0001) (smaller is better). Onc were more accurate for YA but not MA or OA (see Table).

Mean Probability Score

Age Groups	Gen	Onc	p-value
18 – 44	.158	.125	.016
45 - 64	.175	.189	< .001
≥ 65	.199	.235	< .001

In a sample of matched cancer patients, Gen tended to be more pessimistic but gave more accurate prognostic estimates than Onc for MA and OA patients. The associated patterns of care for Onc and Gen patients is being investigated.

STATISTICAL METHODS TO COMPARE PHYSICIAN SPECIALTY PRACTICES: PROPENSITY AND CASE MATCHING. C. Thomas, N.V. Dawson, J.H. Rose, E.E. O'Toole. CWRU, Cleveland, OH.

We identified patient (pt) variables thought to be related to physician assignment to care by an oncologist (Onc) vs. generalist (Gen). These variables were included in a multivariable logistic regression analysis with actual care by an Onc vs. Gen as the dependent variable. The logistic regression analysis was conducted to determine probability of assignment to an Onc (0 to 1), for each cancer patient in the data set. The adequacy of this method in adjusting for the effect of the major covariates was examined by testing differences in individual covariates between pts seen by generalists or by oncologists after stratifying by quintiles of propensity for Onc care.

Each pt under an Onc's care was matched with one under the care of a Gen on the basis of the propensity score. A pt was randomly selected from pts under an Onc's care, then all pts in the care of a Gen were searched to find the pt with the closest propensity score. All possible pairs were identified this way. The difference in propensity score within each pair was calculated and each pair with a positive value was matched with the pair with the negative value closest in magnitude, assuring equal numbers of pairs with positive and negative differences.

The comparability of Onc and Gen pts depends on the propensity score providing sufficient adjustment for all factors that influence selection of pts for care by an onc. The main risk is that there could be an important but unmeasured covariate that is not accounted for in the propensity model. We performed a sensitivity analysis (Rosenbaum & Rubin, 1983) to determine how substantial the effect of a missing (unknown) covariate would have to be to mask a true relative reduction in key outcome variables of total hospital costs or length of survival.

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Nursing Special Interest Group Symposium: In Pursuit of Life, Liberty and Happiness for Older Adults: Challenges and Opportunities for Nursing

Chairs:
Mathy Mezey, Hartford Institute for Geriatric Nursing, New York University, Division of Nursing, NY, NY
Diane Mahoney, HRCA Research and Training Institute, Hebrew Rehabilitation Center for Aged, Boston, MA., and
Tamara Zurakowski, Univ. of Massachusetts at Amherst, School of Nursing, Amherst, MA.
Presenters:
Ann Whall, Univ. of Michigan, Ann Arbor, MI: Overview
Carol Hogue, Univ. of North Carolina, Institute on Aging: In Pursuit of Life
Cornelia Beck, Univ. of Arkansas for Medical Sciences, College of Nursing: In Pursuit of Liberty
May Wykle, , Case Western Reserve Univ. Frances Payne Bolton School of Nursing: In Pursuit of Happiness
Respondents:
The Symposium Chairs and
Eleanor McConnell, Duke University.
Patricia McDonald, Case Western Reserve Univ.
Elaine Souder, University of Arkansas

This symposium, sponsored by the GSA Nursing Interest Group, brings together experienced and new researchers to discuss topics that reflect quality of life issues for the elderly and nursing's role in the elderly's pursuit of life, liberty, and happiness. Dr. Whall will provide opening remarks about nursing's role in quality of life issues for the elderly. Dr. Hogue will discuss her research on exercise and preventive health measures, Dr. Beck will discuss her research on functional independence as an expression of autonomy. Dr. Wykle will discuss the role of religion on Black and White caregivers' perceptions of care giving tasks. The three convening chairs and three new researchers will respond and lead discussion with the participants.

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SELF-REPORTED MOBILITY DIFFICULTY VS. DISABILITY IN HOSPITALIZED ELDERLY.

N. B. Alexander, L. V. Nyquist, J. E. Light, J. C. Grunawalt, M. L. Montagnini. Div. of Geriatric Medicine, Univ. of Michigan, DVAMC, Ann Arbor, MI 48109-0926.

Do self-reports of difficulty add any additional information to standard ADL assessments of disability in mobility task performance in hospitalized older adults? In 86 ambulatory, medically stable older adults (mean age 73.4 years, range 65-93) admitted to a medical unit, we analyzed self-reports of needing assistance from a person or device (DIS) and self-reports of difficulty (DIFF) in transfers (TR) and toileting (TL). Then, using a hand-held stopwatch, subjects were timed as they rose from their bed (RB) and as they entered the bathroom and sat down on the toilet (ST).

Subjects were divided into four groups based on reports of difficulty and disability: requiring assistance and admitting to difficulty (DIS-DIFF), requiring assistance but not admitting difficulty (DIS only), admitting to difficulty but not requiring assistance (DIFF only), and needing neither assistance nor admitting to difficulty (NONE). When comparing these groups with the related task performance, a gradient of mean performance time (sec, ±sd) was found ($p<0.001$).

Group	n (TR)	RB time	n (TL)	ST Time
NONE	53	3.9± 2	44	15.6± 8
DIFF	5	3.8± 1	13	16.9± 11
DIS	14	6.0± 2	11	22.1± 10
DIFF-DIS	13	7.2± 3	17	33.6± 24

In summary, older adults patients who acknowledge both mobility task-related difficulty as well as disability are the most performance-impaired. Thus, in self-reported mobility, difficulty measures complement, rather than replace, disability measures.

CO-IMPAIRMENTS: STRENGTH AND BALANCE AS PREDICTORS OF SEVERE WALKING DISABILITY

T. Rantanen, J. M. Guralnik, L. Ferrucci, S. Leveille, L. P. Fried
National Institute on Aging, NIH, Bethesda, MD.

Joint effects of strength and balance impairments, termed here co-impairements, on severe walking disability were studied. The data are from the baseline of Women's Health and Aging Study (WHAS). Altogether, 1002 women aged 65 and over participated. Severe walking disability was defined as self-reported inability to walk 1/4 mile and customary walking speed in a 4 meter test of ≤0.4 m/s. There were 129 women who were severely walking disabled but able to walk at least minimally. In logistic regression analysis, balance and knee extension strength were independent predictors of severe walking disability. To study the joint effects, nine groups were formed on the basis of strength tertiles by balance categories. In the best balance category the crude prevalences of severe walking disability were 1.2%, 2.9%, and 4.9% in the highest to lowest strength tertiles. In the middle balance category the rates were 4.9%, 10.0% and 22.1%, and in the poorest balance category 14.3 %, 45.4% and 42.6%, correspondingly. The age, body weight and height adjusted odds ratios showed that the risk of severe walking disability in the subgroup with best balance and strength was less than 5% of the risk in the subgroup with poorest balance and strength (OR 0.034, 95% CI 0.007-0.166). Correspondingly, in the subgroups with poorest strength and best balance (OR 0.097, 95% CI 0.025-0.38) or poorest balance and best strength (OR 0.102, 95% CI 0.012-0.866) the risk was about 10%. The age specific estimates of prevalence of severe walking disability in women were: 2.0% for ages 65-74 years, 3.4% for ages 75-84 years, and 9.1% for 85 years and older. The burden of co-impairments is greater than the sum of single impairments involved. An effective way to reduce severe disabilities could be prevention of co-impairments.

STEPPING STRATEGIES USED BY OLDER ADULTS TO RECOVER BALANCE.

DG Thelen, A Rife, A Stein, A Thompson, AB Schultz, JA Ashton-Miller, NB Alexander. Hope College, Holland MI 49423; Univ. of Michigan, Ann Arbor MI 48109.

We investigated the stepping strategies employed by healthy young and old adults to recover balance during a forward fall. Hypotheses tested were that: 1) Old adults would choose to use a multiple step strategy to recover from falls that young adults use a single step strategy to recover from, 2) When young and old adults do employ the same stepping strategy, there would still be significant age-differences in the joint torques and powers developed.

Healthy young (Y, n=25, mean age=24 yr) and old (O, n=30, 72 yr) females and males regained balance by stepping following release from forward leans, without instructions as to recovery strategy. Body segment motions were recorded and used to calculate the ankle, knee and hip joint angles in the sagittal plane. Inverse dynamics was used to calculate the joint torques and powers developed.

Old adults chose to use a multiple step recovery strategy at significantly smaller angles of forward lean than young (O=15 deg, Y=25 deg, $p<0.0001$). When a single step recovery was used by both Y and O, Y reached peak joint torques significantly faster in step leg ankle plantarflexion and stance leg knee flexion ($p<0.005$). In addition, O developed significantly smaller knee flexion power in both the stance and step legs than Y (~50% lower, $p<0.0005$). These differences contributed to O requiring ~40 ms (10%) longer than Y to complete the first step ($p<0.005$).

The results demonstrate that aging significantly altered both the stepping strategy employed and the underlying muscular contractions used to execute a step. These biomechanical differences may relate to difficulties older adults have in regaining balance during a fall situation.

Exploring Mechanisms of Increased Sway in Advanced Age

K.S. Abu-Hasaballah, J.O. Judge, R. Whipple.
Balance and Gait Enhancement Laboratory, University of Connecticut Health Center, Farmington, CT 06030.

Purpose: To explore mechanisms of increased postural sway in advanced age during quiet stance using motor-sensory variables and the two-process, random-walk model of Collins and De Luca (Exp. Brain Research, 1993).

Methods: 34 young adults (26±7 years) and 222 older (78±7 years) volunteers of exercise intervention trials were tested. Sensory function, leg press strength, and performance- gait velocity, Short Physical Performance Battery (Guralnik)- were measured in older volunteers.

Results: There was a wide range of performance in the older volunteers (SPPB: 2-12). Diffusion measures were consistently larger in the older subjects. Short-term diffusion coefficient (cm^2/sec) was more than twice as large in older subjects (0.127±0.099 vs 0.053±0.43* (* = $P<0.001$)); long-term diffusion coefficient (cm^2/sec) was 1.5 times greater (0.014±0.013 vs 0.009±0.006*); and critical point - displacement component (cm^2) was more than 3 times greater (0.317±0.261 vs 0.122±0.091*). Short-term scaling component and time dimension of the critical point were similar for old and young subjects.

A multivariate linear model tested predictors of short-term diffusion in older subjects. Visual acuity, chair rise time, and body weight predicted short-term diffusion coefficient (R^2= 18*). Long-term diffusion was not related to any measure of sensory, motor function, or physical performance.

Conclusion: Lower extremities sensory function was not related to any diffusion measure in a large sample of older subjects. In addition, long-term diffusion coefficient appears to be a characteristic that is not explained by sensory, motor, or physical performance.

SIX-MONTH EXERCISE PROGRAM IMPROVES MAXIMAL PHYSICAL PERFORMANCE M.B. King, C. Gruman, J.O. Judge, R. Whipple, J. Schmidt, K. Abu-Hasaballah, L. Wolfson. Balance and Gait Enhancement Laboratory, University of Connecticut Health Center, Farmington, CT 06030.

Purpose: To determine the effect of group exercise on physical performance in older persons at risk for decline in mobility.

Methods: One hundred fifty-five community-dwelling men and women, aged $\geq$70 yrs., with MMSE $\geq$24, $\leq$1 ADL dependency, and SPPB $\leq$9, were recruited for the NIA-funded Performance Enhancement Project. Subjects were randomized to intervention (IN) or Control (HC: home self-paced exercise) groups. IN exercised at a senior center 3 times/wk. for 6 mos., then at home with senior center practice once/wk. for 6 mos. In months 1-3, subjects walked for endurance and had resistance training. In months 4-6, subjects focused on balance training and functional movements (e.g., stair-climbing). Outcome measures were the MacArthur Battery (MAC), the Physical Performance Test (PPT-8), and 6-minute walk (6MIN).

Results: There were 107 subjects (77% women), aged 76.8±4.3 yrs., tested at 6 and 12 months. Mean MAC scores (±SD)were:

	Baseline	6 months	12 months
IN	3.23±.41	3.49±.44*	3.40±.49**
HC	3.31±.41	3.39±.48*	3.28±.42**

ANOVA group x time: $^{*}p<.03$; $^{**}p<.04$.

Differences in PPT-8 and 6-MIN were not significant at 6 or 12 mos. Multiple regression analysis controlling for age, chronic disease, and mobility showed that baseline MAC score (p=.002) and group assignment (p=.009) predicted change in MAC score at 6 mos. (R^2=.17); at 12 mos., age ($p<.04$) and chronic disease (p=.004) in addition to baseline MAC score ($p<.001$) and group assignment (p=.03) predicted change in MAC score (R^2=.31).

Conclusions: A 6-month group exercise intervention improved MAC, a maximal test of physical performance, in IN compared with HC subjects. Differences in performance were maintained from 6 to 12 mos. by a less intense group and home intervention, though age and chronic disease lessened this beneficial effect.

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SELF-REPORTED QUALITIES OF FAMILY RELATIONSHIPS

C.L. Johnson, Med. Anthropology, Univ. of California, San Francisco, CA. 94143-0850.

Participants:

B. Barer (U. of Calif., San Francisco, CA 94143) The Greats and Grands of Very Old Black Grandmothers.

K. Fingerman (Hum. Devel. and Family Studies, Penn State, University Park, PA 16802). The Quality of Grandparents' Relationships with Grandchildren: Family Structure and Individual Contributions.

B. de Vries (San Francisco St. Univ., San Francisco, CA 94132) & D. Watt (U. of British Columbia, Vancouver, Can.) The Network Connections of Friends and Families: Evidence of Subjective Appraisal.

L. Troll (U. of Calif. San Francisco, CA 94143-0850) Feelings of Attachment with Living and Dead Relatives.

C. L. Johnson (U. of Calif., San Francisco) Expansive Properties of Black Kinship Networks: A Range of Relationship Types.

Discussant:

Alexis Walker (Oregon St. Univ., Corvallis, OR 97311-5102)

Indicators of family relationships in later life are dominated by objective indicators such as contact, proxmimity, and reciprocity, while their qualities are evaluated by global scales that range, for example, from very close to not very close. Questions arise as to whether global measures oversimplify the varieties and complexity of family relationships. This symposium approaches the relationship qualities through a somewhat different lens by examining the content of relationships that emerge from open-ended discussions. The presentations include two analyses of the grandparent relationship that identify why some grandparents are remote from their descendents and how negative behaviors of grandchildren influence the relationship. Qualities of relationships are also assessed by the closeness and distance and feelings of attachment to family members and to the "chosen kin" in black family networks.

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Executive Control: Implications for Functional Capacity and Competency Assessment Among the Aged

Donald R. Royall, MD *Departments of Psychiatry and Medicine /The University of Texas Health Science Cente*
7703 Floyd Curl Drive, San Antonio, TX 78284-7792

DISCUSSANT:
Christine Cassel, MD *Department of Geriatrics/The Mount Sinai Medical Center. New York. NY*

Neuropsychological Correlates of Declining Financial Abilities in Patients with Alzheimer's Disease
Daniel Marson, JD, PhD *Department of Neurology /UAB Birmingham, AL*

Neuropsychological Predictors of Consent Capacity in Parkinson's Disease Using Different Legal Standards
Maureen Dymek, MA *Department of Neurology/UAB Birmingham, AL*

Executive Control and the Capacity to Provide Informed Consent
Jacob C. Holzer, MD *Department of Psychiatry /Tufts Medical School /Boston, MA*

Prevalence of ECF Impairment Among Healthy Non-Institutionalized Retirees: The Freedom House Study
Donald R. Royall, MD

Recent studies identify Executive control Functions (ECF) as robust determinants of functional status and disability across diagnoses. ECF deficits are associated with frontal system disease. Frontal lesions undermine independence by interfering with the initiation, planning, execution, and supervision of complex activities, such as cooking, housekeeping, financial management, and medical decision making.

The prevalence of ECF impairment among the elderly is unknown. However, it is likely to be very common. This symposium reviews recent data on the association between ECF and various competency standards, and then examines these findings in light of ECF's expected prevalence among the aged.

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HANDBOOKS IN GERONTOLOGY: CREATING AUTHORITATIVE KNOWLEDGE IN A MULTIDISCIPLINARY FIELD

T. Cole, University of Texas Medical Branch, 301 University Blvd., Galveston, TX 77555-1311

Participants:

R. Binstock (Case Western Reserve, Cleveland, OH) L. George (Duke University, Durham, NC) Handbook of Aging and the Social Sciences

M. Kimble (Lutheran Seminary of Minnesota, St. Paul) Handbook of Aging, Spirituality and Religion

E. Schneider (University of Southern California) Handbook of the Biology of Aging

J. Birren (UCLA Center on Aging, Los Angeles, CA), K. Warner Schaie (Pennsylvania State University, University Park, PA) Handbook of the Psychology of Aging

T. Cole (University of Texas), R. Ray (Wayne State University, Detroit, MI), R. Kastenbaum (Arizona State, Tempe, AZ) Handbook of the Humanities and Aging

Discussant:

J. Birren (UCLA Center on Aging)

This roundtable will explore the editorial process of creating authoritative knowledge through handbooks of gerontology. Participants are handbook editors in the social sciences, biology, psychology, medicine, the humanities, religion and spirituality. Each editor will address several questions from the perspective of his/her own field: how are the essential topics decided upon? How is that which is essential or foundational distinguished from that which is marginal to the field? How are debates and controversies within the field handled? What are the typical obstacles, confusions, and problems encountered in the course of putting together a handbook? What are the "stickiest" issues, those that call for the greatest judgment and finesse in decision-making? The goal of this session is to remove the curtain of authority from handbooks and to explore how they are actually put together by editors. After all presenters have summarized their editorial experiences, the moderator will lead a discussion which aims at exploring the methodological and substantive similarities and differences among them. We welcome participation from scholars and editors of other authoritative reference materials, such as encyclopedias and textbooks. Our intention is to generate new insights into the vexing questions of "official" knowledge-making in gerontology by identifying areas of unity and difference and potentials for change within the multidisciplinary field of gerontology.

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PREDICTORS OF AND RELATIONSHIPS BETWEEN THREE SOCIAL SUPPORT SYSTEMS IN AFRICAN AMERICAN FAMILIES WHO CARE FOR A DEPENDENT ELDER.

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Empirical evidence documents the importance of social support when an elder family member is disabled. The family's system of social support, as reported by 187 primary caregivers, was investigated in this study. Family system's theory and the need construct from Andersen & Newman's Behavioral Model of Health Service Use (1973) were used to examine predictors of three dimensions of social support (informal, formal, and church) and to investigate relationships between the three dimensions of social support. The study also tested whether caregiver's need (emotional and physical health) moderated the relationship between the care recipient's need (cognitive and physical limitations) and the three dimensions of social support. Hierarchical multiple regression equations (linear and logistic) were used to analyze the data. A significant 18% of the variance in informal social support was explained. Findings provided evidence that receipt of Medicaid, and levels of education were associated with primary caregivers being more likely to use formal support. Findings also provided evidence that primary caregivers with higher levels of informal support and primary caregivers who used church support were more likely to use formal social support. The level of caregiver need did not moderate the relationship between the care recipient's need and any of the three dimensions of social support.

THE ROLE OF INFORMAL AND FORMAL HELP IN RELIEVING CAREGIVERS' STRAIN.

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Strain from caring for a relative with dementia is influenced by multiple dimensions, with outcomes for caregivers (CGs) varying greatly despite seemingly similar situations. The discrepancy between stressors and outcomes suggests that other factors influence this relationship. We addressed how change in the amount of help CGs receive from paid and informal sources (family/friends) between baseline and 3 month interviews affects the relationship between caregiving stressors (patient impairment) and outcomes (depression and overload). To assess direct and mediational effects we first tested the relation of stressors and CG outcomes. Number of behavior problems was positively associated with higher levels of CG depression and overload at the 3 month interview. We next tested the direct effect of formal and informal help on outcome variables. Increases in informal help over time were associated with lower depression, and increases in formal help were associated with lower overload. We then analyzed the mediational effect of change in the amount of help received on the relationship between stressors and outcome variables. Formal and informal help had significant main effects, respectively, on overload and depression, but did not mediate the relation between behavior problems and these measures. These differential effects are consistent with the stress process model of caregiving. Overload , which is directly associated with care routines, is affected by formal help, while depression, which is a more general indicator of distress, is influenced by informal help.

DIVERSE INTERFACES OF INFORMAL AND FORMAL CAREGIVERS BY TASK CATEGORIES AND NETWORK CHARACTERISTICS

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Research on the interface of formal and informal helpers has been limited to a narrow range of personal and health care tasks. This study examines the relationship between formal and informal helpers using a broader range of tasks including: personal care, health care, supervision, care management, and emotional support. Data come from a cross-sectional study of 401 primary caregivers whose elderly relative or friend used case management services. The first stage of analysis developed a typology based on the sharing or segregation of task assistance between informal and formal helpers. Seven types of informal-formal linkages were empirically derived, representing an integration of the three prominent conceptual models. Findings suggested that informal-formal interfaces varied by the type of task category, with personal and health care tasks having the most variation in types of interfaces. Supervision, care management, and emotional support tended to be dominated by interfaces favoring informal assistance with formal sources providing supplemental rather than unique aid. The second stage of the analysis examined whether characteristics of network members influenced the interface between different types of helpers. The presence of a daughter, and to a lesser extent a spouse, promoted interfaces where informal helpers provided unique types of assistance. In contrast, the presence of a home aide in the network promoted interfaces where formal helpers provided unique types of assistance. Having a son in the network did not effect the type of interface. Overall larger care networks led to interfaces that emphasized task sharing between informal and formal helpers.

Children in the Household: Examining the Proliferation of Care-Related Stressors and Loss of Self for Spousal and Adult-Child Caregivers.

Constance A. Krach, U.S. Bureau of the Census, Washington, D.C. 20233.

Responsibility for the care of individuals with Alzheimer's Disease (AD) often lies with family members. However, wide variation exists in the caregiving experience and its consequences for spousal and adult-child caregivers. The stress process model is useful for explaining this differential experience of care-related stress. In this model, stress is perceived as a proliferating process, wherein the original or primary stressors, those directly experienced in the course of providing care, expand into other areas of life, wherein secondary stressors arise. This research examines the effects of one background characteristic, the presence of children in the household on the experience of care-related stress and its consequences for depression.

Data come from the first two waves of a panel study of 555 AD caregivers (326 spouses and 229 adult children) in the Los Angeles and San Francisco areas. For those continuing care at the second wave, 23% have at least one child residing in their household; adult daughters are the most likely to have a child present. For spousal caregivers, having a child in the household is related to higher loss of self, role overload, and conflict over caregiving issues. In contrast, it is significantly related to lower levels of self-loss for adult-child caregivers. The effects of the age and gender of children in the household are further explored to explain these findings. It is found that having children under the age of 18 in the household contributes to higher levels of primary and secondary stressors, as well as depression. Regardless of age, gender also makes a difference. Having daughters in the household is associated with lower levels of stress; sons, by contrast, appear to add to care-related problems, with their presence being associated with higher role captivity, family conflict, and workstrain.

Caregiving does not take place within a vacuum- it is generally one of a myriad of family-related roles held by an individual. Findings with respect to children in the household point to the need for further examination of what happens when caregiving is combined with these other role obligations.

THE EFFECTS OF CAREGIVING ON MEN AND WOMEN: AN EXAMINATION OF PREVENTATIVE HEALTH BEHAVIORS, DEPRESSIVE SYMPTOMS, AND COPING RESOURCES

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Based on prior research on gender, stress, and coping, we anticipated that caregiver stress in the form of spousal disability would have less of an impact on men's than on women's preventative health behaviors, depressive symptoms, and coping resources (self-mastery and neuroticism). Participants (418 women and 399 men) were a part of the Caregiver Health Effects Study (CHES), which assesses the physical and psychiatric health effects of caregiving in persons over age 65. Participants were considered caregivers (n = 392) if their spouse had difficulty with at least one ADL/IADL activity. Caregivers were divided into three roughly equivalent spousal impairment groups: low, moderate, and high. Respondents whose spouse did not have difficulty with any ADL/IADL's were classified as noncaregivers (n = 426). In terms of preventative health behaviors, results showed that caregivers were less likely to have other available supports, and to get enough rest and exercise. However, the differences between caregivers and noncaregivers were stronger among women than among men. To investigate the effects of spousal impairment on depressive symptoms and coping resources, a series of hierarchical regression models were estimated separately for men and women in which each spousal impairment group was contrasted with the noncaregiver group. Among women, for depressive symptoms, neuroticism, and self-mastery, a linear pattern was observed, such that the difference between caregivers and noncaregivers increased as level of spousal impairment increased. In contrast, among men, few differences were observed between caregivers and noncaregivers with regard to depressive symptoms, neuroticism, and self-mastery. The results generally supported the expectation that caregiving stress in the form of spousal disability would have less of an impact on men than on women. These results suggest that interventions should be designed to: (1) assist women caregivers in developing greater coping resources and (2) promote preventative health behaviors among both men and women caregivers.

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EMOTION EXPRESSION AND HEALTH IN TWO GROUPS OF BLACK AMERICANS

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Pannebaker's (1991) model of emotion inhibition and illness suggests that the inhibition of emotion has negative health consequences. Research with Caucasian samples has generally supported the model. In the present study we examine its applicability to 2 non-Caucasian groups.

Participants were 156 community-dwelling older Black Americans (mean age=75 years). Approximately half were US-born and half were from the English-speaking Caribbean islands. The interview protocol included a demographics questionnaire, the CARE Physical Health and Disability Inventory, an Emotions Expression Scale with three subscales: Express, Distract, and Withdraw, and several other measures. All analyses controlled for age and income.

African Americans were higher on withdrawing when upset than African Caribbeans. Express and distracting styles were uncorrelated with any health subscale score. However, the withdrawing style was significantly associated with somatic symptoms, heart disease, stroke, respiratory disease, ambulation problems, and was marginally associated with hypertension. Of note, African Americans reported significantly more somatic symptoms, heart disease, respiratory disease, and ambulation problems, and marginally more stroke. Multiple regressions including emotion regulation as well as other risk factors for illness supported the expectation that emotion inhibition made a significant independent contribution to health.

MARRIAGE BENEFITS IN BLACK AND WHITE: RACIAL DIFFERENCES IN MIDDLE AND LATER LIFE

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Marriage has been shown to have social, economic and emotional benefits for individuals. Our research uses NSFH I & II to examine racial differences in marriage benefits in mid and later life, as well as the effect of marriage loss on well-being. Findings suggest that for Blacks and Whites of both sexes, unmarried are worse off when compared to married persons. Emotional well-being is much lower for White men and women (especially White men), compared to their married counterparts, but for Blacks there is very little difference by marital status. Unmarried Black women and men reported significantly higher rates of happiness and lower rates of loneliness than unmarried White men. Among married persons, White men had the lowest levels of loneliness and depression of all groups studied. Among those who had lost a spouse between T_1 and T_2 White men and women had lower levels of happiness when compared to their White married counterparts. For Blacks there were no significant patterns of emotional well being change after a marriage loss. This research suggests that marriage serves to provide an economic benefit to both Blacks and Whites, but emotional well-being is more strongly tied to marital status among Whites (especially men) than Blacks. We suggest that in mid and later life, Whites focus more on the marital dyad, while Blacks may include alternative relationships to influence emotional well-being. This research points to the implications for sub-groups with regard to changes in marital status and the increase of persons affected by marital disruption in middle and later life.

RACE, SOUTHERN BIRTH, AND BLOOD PRESSURE: EVIDENCE FROM NHANES III

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An important event distinguishing the lives of white and black elderly was the Great Migration from the South. Growing evidence suggests that African Americans born in the South have higher mortality rates. We describe the relationship between birth in the South and blood pressure as a potential pathway for higher mortality. We analyzed data on measured systolic and diastolic blood pressure (SBP and DBP in mmHg) and sociodemographic characteristic on a national sample of non-Hispanic white and black persons age 50+ in the NHANES III (1988-1994) (N=5194). Persons were categorized based on report of birth in the South versus all other regions. Blacks born in the South had a mean age-adjusted SBP =141 and DBP =78, while for Blacks born outside of the South SBP = 136 and DBP = 77. For whites born in the South mean SBP = 135 and DBP = 76, while for those born outside of the South SBP= 133 and DBP = 75. In regression analyses controlling for age, sex, education, and income, blacks born in the South had significantly higher SBP than those born outside of the South (p=.003), while whites born in the South had higher SBP (p=.02) and DBP (p=0.1). There were no substantial differences among blacks or whites born in the South between those who still reside in the South and those who reside elsewhere. These results suggest that higher mortality rates among blacks born in the South irrespective of their current region of residence may be attributable partly to higher blood pressure and that whites demonstrate a similar pattern of higher BP associated with birth in the South.

RACE AND GENDER DIFFERENCES IN COGNITIVE STATUS. Barbara A. Zsembik, (Department of Sociology, University of Florida, Gainesville FL 32611), and M.K. Peek

Blacks and women appear more prone than white men to vascular dementias, Alzheimer's disease, and other impairments of cognitive status. Biological factors (age, vascular disease) commonly are proposed as causal agents underlying race and gender differences, although a social risk factor (education) also is a well-established correlate. This research bridges clinical research, emphasizing biological correlates of cognitive status, and social research, emphasizing social inequalities and consequent health outcomes, to examine sources of women's and Black's disadvantaged cognitive status. Using data from Wave I of the AHEAD, we estimate the direct effects of race on cognitive status and their indirect effects through social and biological risk factors. Structural equation models (LISREL) are used to estimate the direct and indirect effects of race in the full sample (n=6,086), as well as the direct and indirect effects of gender by race-stratified samples (Blacks, n=828, whites, n=5,258). Being Black has a strong direct effect on cognitive status (beta = -.35, $p < .0001$), but also has indirect effects of cognitive status through its effects on both education and biological risk factors. Specifically, their lower levels of education and higher levels of biological risk factors contributes to Black's higher level of cognitive impairment. In the stratified samples, gender is a significant predictor only among whites. Furthermore, social and biological risk factors act differently between the race-stratified samples. The findings of this analysis demonstrate the need to evaluate the direct and indirect effects of race and gender to accurately gauge variation in cognitive status. It further suggests that women and Blacks experience social disadvantage early in life, which cumulates into a lifetime of disadvantages and poor health outcomes such as cognitive impairments.

Preliminary Health Promotion Model for African Americans Using Graphical Interaction Estimation
Armer, Jane M., Conn, V.S., Bickford, A. University of Missouri-Columbia School of Nursing, Columbia, MO

A secondary analysis of data from a study of factors influencing health promotion in culturally-diverse community-dwelling elders was carried out to develop a preliminary model estimating the structural relations among factors potentially influencing health promotion practices. The model was estimated on a correlation matrix generated from a group of 188 rural and urban Blacks. This matrix contained 13 measures of health promotion activities, social support and demographic variables. Included in this set of variables were Health Promoting Promoting Lifestyle Profile (HPLP) and Health Locus of Control (HLCA) subscales, measures of desired and expected control and family and friend social support, and respondent age. The model was estimated using the graphical analysis package MIM. The final model revealed significant relationships among levels of social support from family and friends, desired control and the HPLP subscales. The largest coefficients were for relationships among the various HPLP scales. Specifically, levels of respondent health responsibility, nutrition maintenance and stress management were correlated at or above 0.39. The next step in the health promotion model development will be to estimate and examine the preliminary model for a data set made up of multiple diverse groups, at which time comparisons between different ethnic and cultural groups will be made.

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ASKING NEW QUESTIONS OF OLD DATA: USING DATA ARCHIVES TO STUDY HUMAN LIVES AND THE LIFE COURSE M. Ware-Hargis, Department of Child and Family Studies, The University of Tennessee, 5201 Kingston Pike, Box 6321, Knoxville 37919, and S. Strulowitz, (Department of Sociology, Duke University, 16 Pascal Way, Durham NC 27705-4924).

In a time of shrinking funds for research, often-overlooked treasure houses of longitudinal data provide insights on aging that shape new questions and challenge contemporary research. Decades of twentieth century life course studies have matured and are available for researchers' harvesting, but what are the tools needed for this task?

This session will explore systematic procedures in recasting archival data: repositories of information and existing materials; refining the research questions; recoding;

and data analysis with longitudinal and archival data.

Participants:

K. F. Ferraro (Department of Sociology and Gerontology Program, Purdue University, 1365 Stone Hall, West Lafayette IN 47907-1365, and the National Archive of Computerized Data on Aging (NACDA), Inter-University Consortium for Political and Social Research), will discuss research resources available at the National Archive of Computerized Data on Aging (NACDA), with emphasis on facilitating effective use of data for cross-sectional and longitudinal studies in aging-related research.

J. B. James and J. E. Malley (Murray Research Center, Radcliffe College, 10 Garden Street, Cambridge MA 02138), will address the Murray Research Center's repository of social and behavioral science data on human development and social change, with special emphasis on the lives of American women and data sets that include older Americans.

Student Presenter will present the student's perspective and experience in working with archival and secondary data.

Discussant:

R. A. Settersten (Department of Sociology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland OH 44106-7124).

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ASSISTED LIVING: DIVERSITY IN PROFILE*

S.I. Zimmerman & P.D. Sloane, Institute on Aging, The University of North Carolina, 301 Pittsboro Street, Chapel Hill, NC 27599-3550.

Participants:

S.I. Zimmerman (Institute on Aging, University of North Carolina at Chapel Hill) The Collaborative Studies of Long-Term Care: Overview and Methods

P.D. Sloane (Institute on Aging, University of North Carolina at Chapel Hill) The Varied and Changing Structure of Assisted Living

J.K. Eckert (University of Maryland, Baltimore County) The Variable Process of Care Across Three Types of Residential Care Settings

L.A. Morgan (University of Maryland, Baltimore County) Who Lives Where? A Profile of Residents in Various Assisted Living Settings

S.C.Stearns (University of North Carolina at Chapel Hill) Comparing Apples and Oranges?: Measuring Costs Across the Spectrum of Residential Care

S.L.Bernard (University of North Carolina at Chapel Hill) Aging-in-Place

Discussant:

M. Ory (Behavioral and Social Research, National Institute on Aging, Bethesda, MD 20892)

The term "assisted living" is increasingly used to describe an entire range of residential care facilities providing 24-hour supervision and assistance. These facilities, which range from small "mom and pop" homes, to traditional board and care facilities, to newer health-service intensive facilities, have been growing rapidly as alternatives to nursing home care. This symposium will present findings from an ongoing, four state study of 2300 elderly residents in 210 facilities. The sampling strategy has been designed to provide variation, yet representation, and includes all modes of non-nursing home residential care. Baseline data, obtained from resident and care provider reports, and observation of resident and facility characteristics, are presented for all topics in this symposium. Presentations will identify similarities and differences in persons residing in these disparate settings, as well as similarities and differences in the structure and process of care in each setting. Areas in which one setting seems to provide better quality compared to others will be noted. In addition, costs of care to the residents and the operators will be examined. The historical context of this project and future directions for research in this area also will be discussed.

(*supported by NIA grants RO1 AG13871 and RO1 AG 13863)

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TRANSFORMING PALLIATIVE CARE IN NURSING HOMES

LM Polivka-West, M.S.P., Florida Health Care Assoc, Sr. Dir. of Policy, Tal., Fl.,32301 and HS Tuch, M.D., Genesis ElderCare Svs, Nat'l Palliative Care Dir., Tampa, Fl.

Participants:

RA Kane, Sch. Pub. Hlth, Univ of MN, Minneapolis, MN 55455

Msgr. Fahey, Sr. Assoc., Third Age Center, Fordham Univ., NY, NY

M Tellis-Nayak, V-P, Clinical Svs., Beverly Enterprises, Ft. Smith, AR 72919

Little is known about how people die in health care facilities. Recent reports in the medical literature document poor pain control and aggressive, perhaps unwanted medical interventions in the last days of life of hospitalized patients. The recent focus is the first systematic effort to describe the experience of dying in American hospitals since Osler's initial studies in 1908. There is even less known about nursing homes where over 20% of all deaths occur.

Decision-making at the end of life is impacted by an individual's right to make treatment decisions, the input of family members, and the increasing fear of civil and criminal liability on the part of nursing home providers.

Data will be presented from a study of end of life care in 150 Florida nursing homes. The most important problems in caring for dying residents were reported to be "control of pain, anxiety and loneliness of dying residents, and lack of physician involvement." For example, only 16.7% of Directors of Nursing reported the attending physician as "very helpful in discussing advance directives and willing to come in to see the patient." A discriminate analysis will provide a typology for a relationship between nursing homes and hospice in end of life care. To contribute to an informed review of the research outcomes, participants will discuss legal, regulatory and social barriers to effective end of life care. Public policies and practice standards will be addressed for transforming palliative care in nursing homes.

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LINKING FAMILY AND PATIENT DATA TO STUDY CAREGIVING

L. Boise, Alzheimer Disease Center, Oregon Health

Sciences University, 3181 SW Sam Jackson Park Rd. (CR131), Portland, OR 97201

Participants:

M. M. Neundorfer, K. A. Smyth, J. C. Stuckey, & M. E. Strauss (University Alzheimer Center, CWRU/UHC, Cleveland, OH) Does Caregiver Depression vary with Patient Depression Over Time? Results of an Individual Level Analysis.

K. Hooker, S. Bowman, D. Coehlo, S. Lim (Dept. of HDFS, Oregon State University, Corvallis, OR) Behavioral Changes in Dementia Patients: Relationships with Caregiver Well-Being.

C. E. Drebing, E. E. McCarty, A. Mello (Boston University ADC/Bedford VAMC, Bedford, MA) The Moderating Role of the Caregiver-Patient Relationship on the Impact of Patient Symptoms on Caregiver Distress.

C. Anderson-Hanley, J. Dunkin, J. L. Cummings, S. Rosenberg-Thompson, T. L. Strickland, B. L. Miller, and J. L. Fitten (Depts. of Psychiatry and Biobehavioral Sciences, and Neurology, UCLA; Charles Drew University of Medicine and Science, LA; Sepulveda VA Medical Center; Glens Falls Hospital, NY) Dementia Caregiving and Ethnicity: Structural Equation Models

Discussant:

B. Miller (Depts. of Social Work and Sociology, Case Western Reserve University, Cleveland, OH)

While there has been much research on family caregiving over the past decade, only a few of these studies have taken advantage of the wealth of data on dementia patients available through the NIA-funded Alzheimer Disease Centers. This symposium, which is sponsored by CHORD, a working group of the NIA Alzheimer Disease Centers, will report on four studies which have utilized patient data bases of the Alzheimer Disease Centers to study the relationship between patient characteristics, such as patient symptoms, depression, and behavior problems, and caregiver outcomes. In addition to presenting research findings, a goal of this symposium is to discuss the potential of the Alzheimer Centers as a resource for research on family caregiving.

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WHAT AGING SHOULD HAVE LEARNED BY NOW FROM THE DISABILITY MOVEMENT: NEW VOICES FROM THE FEDERAL EXECUTIVE BRANCH.

Moderator: Susan Daniels, Deputy Commissioner for Disability and Income Security Programs, Social Security Administration (Invited)

If noticing them at all, America has been short-sighted in envisioning the transformations needed and the prospects possible given the demographics of the next forty years. Baby Boomers already living with physical impairments & chronic illness may know more than the whole society about the adjustments facing the rest of us in the early 21 Century. The disability rights movement has already demanded adaptations at the structural, institutional, and physical level to facilitate access to all aspects of civic life. And persons with disabilities know the daily requirements to remain productive, contributing citizens.

What opportunities and barriers have been confronted in these processes? How formidable are the barriers that remain? Realistically, how much is likely to change on the watch of the current Administration?

In an unprecedented simultaneous appearance, four federal officials will address these questions critically, sharing their own agenda for their agencies, and reflecting on where the Adminsitration may yet take the country.

Panel:

Bob Williams, Deputy Assistant Secretary for Planning and Evaluation for Disability, Aging, and Long Term Care, DHHS. Previously Commissioner of the Administration for Developmental Disabilities, Mr. Williams became Deputy Assistant Secretary in September 1997.

Jeannette Takamura, Director, Administration on Aging, DHHS. (Invited).

Judy Heumann, Director, Office of Special Education, DHHS. (Invited).

Discussants: Nancy Eustis, University of Minnesota, and Fernando Torres-Gil, former federal officials.

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TOWARD A MARKETPLACE APPROACH TO HEALTH AND HUMAN SERVICES: IMPLICATIONS FOR INCAPACITATED CONSUMERS AND THEIR SURROGATES.

M.B. Kapp, Office of Geriatric Medicine & Gerontology, Wright State University, Box 927, Dayton, OH 45401-0927.

Participants:

E.S. Cohen (Community Services Systems, 136 Farwood Rd., Wynnewood, PA 19096) Sorting Out Legal and Moral Obligations in Caring for People With Dementing Diseases.

W.N. Kavesh (Philadelphia Veterans Affairs Medical Center, Philadelphia, PA 19104) Old People in the New Marketplace: A Physician's Perspective.

I.C. Freeman (Advocacy Center for Long-Term Care, Bloomington, MN 55425) A 360-Degree Look at Consumer Choice in Long-Term Care.

M.B. Kapp (Wright State University) Protecting Consumer Choice While Protecting Consumers.

Discussants:

K. Wilber (Andrus Gerontology Center, USC, Los Angeles, CA 90089)

N. Coleman (ABA Commission on

Legal Problems of the Elderly, 740 15th St., NW, Washington, DC 20005)

In the delivery and financing of health and human services for older persons, the philosophical, organizational, and financial paradigm is shifting from direct government regulation of services and providers towards more emphasis on individual consumer choice, control, and responsibility. This symposium will identify and analyze the implications, positive and potentially troublesome, of this emerging marketplace model for decisionally incapacitated persons and their advocates and surrogates. Lessons for advocacy, practice, and public policy formulation will be drawn.

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POVERTY, CRIME, AND NEIGHBORHOOD: MEDIATING QUALITY OF LIFE FOR ELDERS

Crystal Garcia, Ph.D., Karen S. Harlow, Ph.D., Center for Urban Policy, SPEA, Indiana University, Indianapolis, 46204 and Roger Parks, Ph.D. SPEA, Indiana University, Bloomington, IN

Community policing, neighborhood watches and other strategies to create safe environments are critically important to the quality of life of elderly residents. This study describes an analysis of two community surveys in Indianapolis. It applies an ecological model of aging to data for more than 3000 elders that identify demographic, social, health, victimization experiences, and attitudinal patterns that can be matched at the census tract level to objective indicators of quality of life such as crime rates, neighborhood characteristics such as physical incivilities or urban decay, the suprapersonal environment, poverty rates, and quality of governmental services including police services. Previous studies of fear of crime and perceptions of vulnerability have usually resulted in low R2s. Variations in study designs have often resulted in conflicting findings. The merging of two separate studies and a third objective indicator data base provides unique opportunities to model perceptions of vulnerability and overall quality of life. The patterns identified here support the importance of health status and the overarching importance of attitudes about one's neighborhood as the core components of life satisfaction and quality of life perceptions. Indeed, the relationship of neighborhood satisfaction and perceptions of safety were so strong that a new variable that included both was constructed as a new outcome variable of perceived risk and life satisfaction. The importance of neighborhood safety perception factors identified here substantiates the need for social services that support neighborhood involvement, activities and nurturing to create the components that define quality of life for elders as well as other age groups.

THE PERSPECTIVE OF SERVICE PROVIDERS IN NEW YORK CITY ON HOUSING AND RELATED SERVICES FOR OLDER ADULTS INFECTED AND AFFECTED BY HIV/AIDS.

H.J. Moulton & L.L. Dean, Columbia University, School of Public Health, Division of Sociomedical Sciences, 600 West 168th St, New York, NY 10032

Because of a public perception that older people are not sexually active or do not engage in high risk behaviours, such as injection drug use, older adults may not be receiving HIV/AIDS education and services. As part of a larger needs assessment, twenty in-depth, qualitative interviews of service providers were conducted to assess the needs of older people living in New York City who were infected or affected by HIV/AIDS. Service providers included case managers, agency directors, and nurse practitioners who worked with either HIV infected persons, seniors, or both. Dominant themes which emerged were that few services were targeted specifically to elderly, more education for providers (particularly physicians) and elderly is needed, few agencies receive reimbursement to manage the family as a case, rather they are limited to the person with AIDS (PWA) despite their feelings that caregiver support is important not only for the caregiver, but for the PWA, and emphasis should be placed on integrating services where seniors, or caregivers, and their families can receive a wide range of services. With respect to housing, there was a perception by some that seniors had fewer problems because of access both within the AIDS services and aging networks. This finding was not corroborated in a survey of HIV infected seniors (n=100) performed as a separate component of the needs assessment, none of them had received senior housing nor were they on a waiting list for it.

POSSIBILITIES FOR A HOME DELIVERED BREAKFAST PROGRAM

S.G.Munroe, Dept of Nutrition, University of North Carolina at Greensboro, Greensboro,NC 27402-6170 and S.A.Quandt, Dept. Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem,NC 27517-6015.

In 1972 the Older American Act established a nutrition program to combat hunger and food insecurity, including home delivered meals for the elderly. These meals are to provide one-third the Recommended Dietary Allowance (RDA). It has been reported that some meal recipients divide the meal as they do not have sufficient resources to prepare and provide an additional meal themselves. A one month pilot study providing a breakfast meal in addition to the volunteer delivered lunch was conducted. When surveyed, 45% responded that the breakfast was consumed the next morning as a breakfast meal, 36% ate the meal as a "snack", and 16% for their evening meal. When asked what the greatest benefit was, 86% of the participants responded relief of meal preparation stress. Based on Handbook No.8, the nutrient content of 1 C carton shelf stable milk, 1 C box Post Raisin Bran, and a medium banana provide: energy- 361 kcal; protein- 14 g; riboflavin- 1.3 mg; vitamin B_6 -1.68 mg; vitamin B_{12} - 4 mg; folate- 232 mg; calcium- 334 mg. The provision of breakfast could provide much needed nutrition using the existing meal delivery system. Service providers are faced with the dilemma of whether to provide better nutrition to existing clients or to provide services to more clients, as waiting lists for home delivered meals grow.

AGENCY RESPONSES TO A CHANGING FUNDING ENVIRONMENT

I.A. Gutheil & R.H. Chernesky, Ravazzin Center, Fordham Univ. Graduate School of Social Service, Tarrytown, NY 10591

What happens to agencies that are struggling to provide quality services while anticipating cutbacks and preparing to downsize? This presentation reports on a panel study of social service agencies serving older adults and their families in a large metropolitan region. Agencies were surveyed at the end of 1995, 1996, and 1997. The 32 agencies which responded all three times are examined here. The three years under study began with threats of major federal cutbacks and concluded with a stabilized funding environment. The period provided a rich context to examine strategies used and the consequences of these strategic choices. Among the major findings: 1) many of the initial efforts to deal with anticipated funding cuts resulted in permanent changes in the ways services are delivered; 2) locating new sources of funding was a successful strategy for almost 2/3 of the agencies; 3) increased activities to prevent cutbacks occupied 60% of the agencies; 4) almost 2/3 of the agencies added new programs or services; 5) the future was no longer viewed optimistically, but rather cautiously by over 2/3 of the agencies.

A NEEDS ASSESSMENT IN AN URBAN SETTING: GROWING OLD IN NEW ORLEANS

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In order to provide necessary services, professionals working in the field of aging require reliable data regarding the needs of older adults in the communities they serve. Under the direction of the New Orleans Council on Aging, an affiliated group, the Elder Action Coalition conducted a needs assessment survey by telephone on two samples: a large sample representative of the total population over age 55 in Orleans parish (N=923) and a subset of this population, older adults enrolled in an older adult education program (N=92), the Rosa Keller Campus. From results of the representative sample the following conclusions were drawn: Social isolation is a risk factor for 30 % of older adults, care of frail elders is provided mostly by family and friends, affording medication is a significant need for low and middle income seniors, nearly half of older adults do not drive and rely on others for transportation, there are unmet needs for homemaker services and for home repair and maintenance. As expected, the needs for the subset of the sample were not as severe. Implications for policy decisions are discussed, including strategies for addressing the unmet needs.

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EXPLORING ASSISTANCE IN SWEDEN AND THE UNITED STATES

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International comparisons of health services use are often performed at the macro-level. Few micro-level comparisons exist. Using descriptive statistics and multivariate regressions, we compare informal and formal assistance with activities of daily living (ADLs) from the Medicare Current Beneficiary Survey in the U.S. to a comparable sample in Sweden, a country with a universal system of community based services. Our results indicate that a simple story of greater use of paid formal services in Sweden and more unpaid informal use in the U.S. masks a more complex relationship. For example, assistance with ADLs seems to be targeted better in Sweden in several ways: assistance rates are similar at younger ages in the two nations, but are much higher among the oldest-old, those with disabilities, and those living alone in Sweden. Assistance also shows different interaction patterns between variables like gender and age across the two nations. Overall needs are matched well with services in Sweden. Fewer than 1 percent of the Swedish sample report unmet needs for assistance, in the United States, more than 30 percent report unmet needs.

A Prospective Study of Changes in Well-being among Primary Caregivers of Frail Elderly in Japan: Different Transitions by Caregiving Situations and Types of Kin Relationship

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This study examined one-year change (1996-97) in 731 primary caregivers' well-being in different caregiving situations (continuing care at home vs. institutionalized or long-stay hospitalization vs. bereavement), and by type of kin relationship of caregiver to elderly (wife vs. husband; daughter vs. son; daughter in-law vs. other relatives). Well-being was evaluated by depressive symptoms, cumulative fatigue symptoms, and a social activity score. Repeated measures MANOVAs were performed for each well-being measure.

For depressive symptoms, we found a significant three-way interaction for time × caregiving situation × type of kin relationship. Among respondents who continued to provide care at home, all types of kin relationship showed increased levels of depressive symptoms over time. Among respondents who ceased caring at home due to institutionalization or bereavement of elderly, we found transitional patterns of depression which differed by type of kin relationship: although spousal depression worsened, those of daughters-in-law improved. Cumulative fatigue symptoms and social activity remained unchanged regardless of change of caregiving situation or type of kin relationship. These findings suggest that caregiver stress and burden are not necessarily relieved once caring for their elderly family member at home ceases. Future models of caregiver burden need to be sensitive to the different ways in which the caregiver experience depends on type of kin relation.

COLLECTIVE AND INDIVIDUAL FAMILY CAREGIVING SYSTEMS FOR THE ELDERLY IN BOTSWANA: CHALLENGES TO THE AVAILABILITY TO PROVIDE CARE

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Population is a global phenomenon. Yet, little is known about the care of the African elderly. The assumption in Botswana is that families support their own elderly relatives. The purpose of this study was to explore the experiences and needs of the family caregivers of the elderly (60+). Twenty-four caregivers from rural and urban settings were interviewed. Data were transcribed and analyzed utilizing the grounded theory approach. The results indicated that three family caregiving systems existed; the collective, individual and a hybrid of the collective and individual caregiving system. The collective caregiving system was based on the African collective way of life which was pivotal to the African way of life. The individual caregiving system was viewed as a departure from the norm, and was commoner in urban settings. Some caregivers fell in-between the two systems, reflecting a transformation in the family structure and availability to give care. Implications for the development of alternative community based and culturally congruent support programs of care for the elderly are discussed.

SERVICE UTILIZATION AND WILLINGNESS TO PAY FOR HOME AND COMMUNITY-BASED SERVICES BY AMERICAN-JAPANESE WORKING CAREGIVERS.

K.K. Nitz, Executive Office on Aging, Dept. of Health, State of Hawaii, 250 South Hotel St., #109, Honolulu, Hawaii 96813.

Past studies of working caregivers focused on identifying the source and nature of stress and effective measures to enable employees keep taking care of their kin such as respite services. The major assumption has been that the public sector or employer will contribute to these services. This study examined the employee's capacity and willingness to pay for these services in the light of recent trends toward cost-sharing and attempts to reduce the public share of long-term care financing.

The data came from 4,029 returned questionnaires from a mail survey of 8,000 randomly selected state employees. About 20% of respondents were current caregivers. About 50% were of Japanese ancestry. Twenty-one percent of caregivers provided assistance with ADL activities, with 6% providing two or three ADL assistance, and 81% provided assistance with IADL activities. One third of care recipients used some support services, the most popular being transportation and others available free of charge. While 86% of households had income at or above the median household income and 31% contributed an average of $240 per month, less than 6% used housekeeping, home health or personal care aides.

Self-identified needs for eight types of services and the willingness to pay for services were analyzed by gender, household income, level of stress, type of assistance care recipient needed, house-hold size, and meaning associated with caregiving. Current services used were not necessarily linked to household income. Though the employees potentially in need of services were identified, they were not ready to pay for services, and those who would pay were not ready to pay the market price. From long-term care system development perspective, it may be a mistake to translate the existing needs directly into demand, particularly for fee-based services. Cost-sharing may work for this income group.

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THE VULNERABILITY OF ELDERLY MEN TO ABUSE: IMPLICATIONS FOR PRACTICE.

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Elder abuse victims are generally thought to be mainly women. However, government reports, empirical research findings, and practice experience suggest that some groups of elderly men are especially high-risk for abuse. Such groups include those who are (1) alone and lonely, (2) incarcerated in prisons and in mental institutions, (3) living with wives or adult children, (4) dwell within inner cities, (5) gay, or (6) within long-term care facilities. In addition to their vulnerability to the victimization by strangers, paid caregivers, or family members, elderly men are also more likely than elderly women to engage in such self-abusive behavior as suicide, alcoholism, and drug use, and to disregard their safety and health. Additional problems exist for elderly men who are ethnic or racial minorities or immigrants or refugees. Elderly men have often been under-served by community services because of (1) their invisible locations (in private dwelling, inner cities, rural areas), (2) a lack of needed outreach, (3) destain for certain types of therapeutic treatment programs, (4) female-dominated staff and clients, and (5) professional bias against elderly men. Awareness of, and concern for, the vulnerability of elderly men to abuse, and their need for more effective service planning and delivery, will hopefully result in action. Morally, the concern regarding the abuse of elderly men should be no more, but no less, than the concern regarding the abuse of elderly women.

ELDER ABUSE AND MEMORY IMPAIRING ILLNESS: A PREVENTION MODEL.

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Memory impairing illness is one of the key risk factors correlating with elder abuse, neglect and exploitation. As life expectancy increases, so too will the number of people affected by a memory impairing illness. Unless major new social/health policies are enacted, it is anticipated the primary system of care for people with a memory impairing illness will continue to be the family. Providing care to a loved one with a memory impairing illness is stressful. Theories about elder abuse recognize stress as a precipitating factor.

Under a grant from the Kansas Department on Aging, an education model was developed and delivered to 20 family support groups sponsored by a mid-west chapter of the Alzheimer's Association. (Support group locales ranged from communities of 10,000 to 250,000; total attendance was 215.) The purpose of the model was: assess support group members initial knowledge about elder abuse; present statistics about the incidence/prevalence; discuss theoretical perspectives regarding the causes; provide information on risk reduction.

Among the findings from the project, most families: 1) have little awareness of elder abuse; knowledge they do have is often inaccurate (e.g., beliefs that elder abuse is a nursing home problem, not a family issue); 2) do not recognize how stress effects them, or they are in denial; 3) will increase the number of stress reduction strategies to try in the future (initially citing 3; increase to 7 by end of program.)

It is unknown if this prevention model will have long lasting effects; follow up study is recommended. A final outcome of the project is design of a training manual for support group facilitators to use in future programs. With projections that 14 million elders will be affected by memory impairing illness, it is ethically imperative to address elder abuse prevention now.

SELF NEGLECT IN OLDER ADULTS: DEMOGRAPHICS AND RISK FACTORS.

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In an effort to preserve the health security of our aging population, an awareness of factors that contribute to increased health risk such as that posed by self neglect is vitally important. The study of elder abuse has typically been conducted in a broad manner, with many forms of abuse including self-neglect categorized together under one "abuse" heading. Significant differences lie among both perpetrators and victims of these crimes, and individual analysis is warranted so that specific interventions can be designed and instituted. Our study represents an initial attempt to more precisely define the scope and characteristics of self-neglected elderly in comparison to other abused groups. Cases reported to the Hillsborough County Crimes Against the Elderly Unit (C.A.T.E.) for the years 95-96 (n=614) were examined and coded based on incident type, and socio-demographic variables were collected. Self-neglect cases comprised 16% of all incidents recorded. Logistic regression analyses indicated in comparison to other forms of abuse, self-neglecters were more likely to be men (p=.0031), aged 65-75 (p=.0031) and living independently in the community (p=.0039). Individual comparisons showed victims of self-neglect were distinctly different from victims of physical abuse in that physical abuse is primarily perpetrated against women living with someone else, while self-neglecters are primarily men living alone. Women were also primarily at risk for financial exploitation in comparison to their self-neglect counterparts, though for both these groups living alone significantly increases the risk of abuse (p=.0014). Implications of these results will be discussed in terms of Adult Protective Service policies and programs for self-neglecting older adults and future directions will be suggested.

ELDER ABUSE AMONG MINORITY COMMUNITIES--THE FINDINGS OF TWO STUDIES

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Elder abuse has occurred for centuries although recognition of this problem is relatively recent. Although significant progress has been made, elder abuse in domestic settings is still not well understood by the public and even by many professionals who work with the elderly. The true national incidence of elder abuse is not known, however, several studies have been conducted in the past to generate national estimates for the prevalence of the problem. While much attention has been given to documenting elder abuse among the White population little consideration has been given to documenting elder abuse among minority populations. The purpose of this paper is to present and apply the findings of two recent studies on elder abuse in domestic settings, *The National Elder Abuse Incidence Study* and *A Survey of State Adult Protective Service Agencies for FY 95 and FY 96* both conducted by the National Center on Elder Abuse to the July 1997 estimates of the U.S. population by age, sex, and race/Hispanic origin from the U.S. Bureau of the Census.

This paper will apply the estimates of elder abuse among minority populations found in the above mentioned studies to the current population of the United States. Furthermore, this paper will explore in detail the socio-demographic characteristics of abused minority elders and how these characteristics compare across the racial groups and to the majority population. In addition, this paper will address the following research questions based principally on the findings from the two studies. What are the characteristics of abused minority elders? Are some racial/ethnic groups more likely to be targeted for particular types of abuse? Do abuse patterns vary across the racial/ethnic groups?

SUPPORT GROUPS FOR VICTIMS OF ELDER ABUSE: PARTICIPANTS, PROGRAMS, AND FUTURE PLANS.

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Although support groups specifically organized for older victims of abuse first appeared in 1986, little information is available about them. Thirty programs were located in a nationwide search: 14 sponsored by aging services (AS) and 16, by domestic violence programs (DV). Interviews with the leaders revealed that the average total number serviced by the AS groups was 67 and by the DV groups, 68; the annual number was 17 and 23, respectively. Average age of AS participants was 70, and of DV participants, 64. 29% of the AS groups were all-white compared to 69% of the DV groups. Of the 30 support groups, all but 4 had the same leader since their inception. Average attendance for AS groups was 5.7 participants; for DV groups, 4.6. Referrals to AS groups most often came from aging services while referrals to DV groups came from DV programs. Next most often source of referral to either group was the participant. Support came from a variety of sources but the DV groups seem to be more effective than the AS groups in tapping charitable dollars. Strengths were viewed in terms of what was provided to members (emotional support, place to talk, empowerment, help with coping) as well as program components (continuity of leadership, location, older leaders). The major weakness was the difficulty in convincing elders to come to a group meeting. Accessibility, lack of funding, and lack of appropriate referrals were seen as barriers to group development. Given the perception by the leaders that these groups had been successful in improving the lives of the participants, future plans involve greater effort in recruitment, education of the community, and establishment of referral networks.

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GOALS IN GERIATRIC ASSESSMENT: ARE WE MEASURING THE RIGHT OUTCOMES?

C. S. Williams, E.H. Bradley, S.T. Bogardus, E. Cherlin, M.E. Tinetti, Yale School of Medicine, New Haven, CT 06520-8034.

Previous evidence regarding the value of geriatric assessment has focused on patient and family outcomes including patient functioning and cognition, inpatient and outpatient utilization, and caregiver burden. Despite these outcomes studies, little research exists to identify common, patient-specific goals of care in geriatric assessment. The objective of this study was to describe goals for care as expressed by patients, families, and physicians who provide or seek such services.

Consecutive new patients (n=175) presenting to the Adler Geriatric Assessment Center at Yale-New Haven Hospital were enrolled in the study. Patients (with Folstein MMSE of 18 or greater), family caregivers, and physicians were interviewed to determine their goals for the patient's care, using open-ended questions. Data were analyzed to assess the range and frequency of various goals reported by subjects.

Although patients most often expressed the goal of maintaining or improving functioning (59.4%), family and physician goals spanned a large range of areas. For instance, education of family or patient was a family goal in 27.6% of cases; increased supervision of the patient was a family goal in 51.9 % of cases. Physician goals often included appropriate use of community services (29.1%), environmental modifications (16.0%), and driving evaluation or cessation (14.9 %).

The findings demonstrate that goals of geriatric assessment are broad, encompassing education and support, appropriate service referrals, and safety concerns. The research suggests that such goals of care may be important in designing outcomes studies that adequately measure the effect of geriatric assessment on the lives of older adults and their families.

BUNDLING CLIENT ASSESSMENT PROTOCOLS AMONG HOME CARE CLIENTS

E MARCANTONIO, JN MORRIS, RN JONES, L LIPSITZ
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This report summarizes models exploring bundling of Client Assessment Protocols (CAPs) in a cross-national sample of home care clients (n=2790, mean age 76 years, 65% female). The Resident Assessment Instrument for Home Care (RAI-HC©) Manual presents definitions for thirty CAPs which signal medical, functional, or psychosocial health areas requiring further attention. Home health care providers record client characteristics using a standardized data collection instrument (MDS-HC). MDS-HC data elements are entered into a computer algorithm which returns CAPs according to published definitions. The technique of exploratory factor analysis (EFA) was used to look for patterns of CAPs, driven by the hypothesis that an unknown but fixed number of underlying processes cause patterns of morbidity. Results suggest a five-factor solution yields interpretable factors (incorporating 22 items): profound impairment, cardiovascular symptoms, functional limitation, alcohol/behavior problems, falls/psychotropic medications. Caution is required in interpreting factors based on CAPs as some share MDS-HC data elements. These factors replicate with small variations in samples drawn in the US and Japan. Elucidation of underlying morbid processes may help researchers and service providers understand patterns of morbidity and streamline care planning among home care clients.

THE ASSOCIATION AMONG MORBID CONDITIONS AND FUNCTIONAL DISABILITIES: AN EMPIRICAL ASSESSMENT.

V.L.Lamb, Department of Sociology, University of South Carolina, Columbia, SC 29208.

Research on elderly health indicates that the loss of functional abilities does not always follow a hierarchical pattern. Morbid conditions, particularly non-lethal conditions, affect the ability to perform specific functional tasks. The purpose of this paper is to examine the relationship among specific morbid conditions and specific functional disability problems.

Multiple correspondence analysis (MCA) is used to evaluate and spatially map the association among diseases and disabilities, using data from AHEAD, a community-based sample of persons aged 70 years and older. The MCA results indicate that having a stroke is associated with IADL problems in grocery shopping and managing money. Problems with walking are associated with a recent fall or broken hip, diabetes, lung disease, arthritis and pain. Comorbid conditions that include stroke also have strong associations with ADL problems. The results of this study produce a better paradigm of specific functional problems associated with morbid conditions, which will inform policy on the possible service demands for health care and long-term care for the elderly

EVALUATING PERFORMANCE OF CASE MANAGEMENT PROGRAMS FOR OLDER PERSONS.

J. J. Cotter, Virginia Commonwealth University, Box 980306, Richmond, VA, 23298. K. Vesley, Virginia Department for the Aging, William Massey, Peninsula Agency on Aging.

Case management programs coordinate community-based services to a growing elderly population with functional dependence caused by chronic diseases. Quality improvement and assessment of performance of case management are becoming more important as older persons use a wider variety of health and social services. Federal and state funding agencies, long-term care insurance companies, and managed care firms seek to distinguish community-based organizations on their performance and results. The challenge is to develop indicators that are measurable, responsive to concerns of payers, clinically relevant, and not unduly burdensome to collect.

This session describes the development of performance indicators for 14 area agencies on aging in Virginia who operate case management programs for community-based care of frail older persons using a combination of state and federal funds. Conceptual, policy and operational perspectives are presented. Through a series of quality team sessions a consensus was achieved on performance indicators to evaluate these case management programs. Measures assess efficiency and effectiveness of case management activities and service. Of 24 distinct measures considered, 9 measures were selected for a test-set. Future data collection of the measures and planned use of the information to allocate funds based on performance will be described. The ability to assess and assure quality case management and to establish outcomes of the processes of care can guide both existing and expansion programs. Information on outcomes and performance is useful to state and local administrators, case managers, older persons and their families.

ASSESSING THE EFFICACY OF INTEGRATED CASE MANAGEMENT IN AN INDEPENDENT LIVING PROGRAM.

J.W. Campbell, L.W. Kaye, M. Mogul, and M. Grossman, Graduate School of Social Work & Social Research, Bryn Mawr College, Bryn Mawr, PA 19010.

Conceptual refinement of case management services geared to community dwelling older adult populations continues to progress amidst efforts to restructure health care delivery. The Continuum of Independent Living Program (CILP), a two year Pew-funded demonstration operated by Main Line Health System and Community Health Affiliates, emphasizes integrated case management methods including: early identification, comprehensive assessment, timely provision and ongoing service monitoring. Entry (T1) and post-enrollment (T2) assessments of elder participants (N=90) in CILP and their caregivers (N=43) at 5 urban and suburban congregate living sites document consistent gain on a series of evaluative measures. Findings confirm decreased institutionalization rates, reduced service fragmentation, enhanced capacity for independent living through the use of assistive technology, and increased service satisfaction over a one year period. Recommendations for maximizing the efficaciousness of integrated case management services are offered.

DIFFICULTY AND DEPENDENCE IN ELDERLY PEOPLE

P.Ranieri, R.Rozzini, S.Franzoni, M.Trabucchi GERU, P.Richiedei Hospital, via Pinidolo 23, 25064 Gussago (BS) and Geriatric Research Group, 25122 Brescia (Italy).

Background: BADL disability should be further defined as degree of difficulty. **Objective:** To evaluate the risks of five-year mortality in community-living older persons with different degree of disability - difficulty. **Design:** Longitudinal study. **Subjects:** 549 community-dwelling subjects aged 70 and over (M=179, mean age 76.9±5.4 years). **Methods:** At baseline valid multidimensional questionnaires were avaible. Vital status and time of death five years after the baseline evaluation was ascertained by telephonic interview of patients or caregivers. Self reported basic of daily living (BADL) were assessed by Katz scale. Persons not dependent in BADL mobility but unable to perform 100 meters were considered "elderly with difficulty". For the aim of the analysis patients were stratified into three classes according to: being dependent in BADL mobility (class III), being independent in mobility but unable to perform 100 meters (class II), and independent in mobility and able to perform 100 meters (class I). **Results:** 153 persons (27.8%) died during the five years follow-up period. The mortality curves for the three mobility groups show that the highest mortality rate was observed in persons dependent in mobility, and the lowest mortality in participants independent in mobility and able to perform 100 meters. Being in the more disadvantaged BADL mobility classes (classes II and III) yielded a 1.8 (95% C.I. 1.1-2.9) and 3.3 (95% C.I. 2.1-5.0) fold greater risk of mortality than being independent in mobility without difficulties (class I), independently from acknowledged factors related to survival (age, gender, number of diseases, number of symptoms and number of drugs) entered as covariates. **Conclusions:** Our data support the hypothesis that in the assessment of disability in BADLs, questions about difficulty and dependence provide complementary information and should be implemented in the clinical practice.

PLANNING AND PROVIDING: EFFECTIVENESS, EFFICIENCY, RESPONSIVENESS AND NEEDS ASSESSMENT.

Karen S. Harlow, Ph.D., Center for Urban Policy, SPEA, Indiana University, **Elinor Kinney**, J.D. Indiana University, and **Bob Hornyak**, MPA, Family Social Services Administration, Indianapolis, IN.

The goal of comprehensive planning to improve service delivery in the aging network is addressed in a comparative case study in Indiana. The project applies the Planning Information Pyramid process to needs assessment data gathered for the state of Indiana in 1997. Data from the U.S. Census, the SOA, and the Behavioral Risk Factor Surveillance System were utilized as "Level I" data. The SOA and NMES served as the basis for Level II projections to small area estimates for county-level planning. The Robert Woods Johnson Quality Information Demonstration Project provided Level III data concerning responsiveness and effectiveness of delivered services, and a randomized study of more than 1500 Indiana elderly provided the Level IV assessment of prevalence and unmet need. Cost data associated with the RWJ project and NAPIS information allowed calculation of the potential costs of biasing or over-or underestimation of potential need and demand for services. A match of service provision information with measures of need in the state identified a pool of 29,000 elders who are not reached by existing programming. Comparisons of data bases for planning indicate that accuracy in projections is strongly enhanced by localized data bases. Census information undercounts potential service demand because cognitive impairment is not identified. The BRFSS provides helpful estimates at the state level, but the question format is not comprehensive enough for SUA and AAA planning needs. SOA and NMES introduce bias from other states even when using regional figures. Community surveys improve the accuracy of planning and thus are cost-effective due to improved targeting strategies.

PREDICTORS OF BURNOUT AMONG CASE MANAGER WHO WORK WITH OLDER ADULTS.

Natarajan M. Gowda, Assistant Professor, Social Work Program, Northwestern State University of LA, Natchitoches, LA 71497.

This survey study examines the level of burnout experienced by 218 case managers who work with Older Adults. It also explores the multidimensional factors that were associated with three aspects of Burnout. The results indicate that 40% of the case managers had experienced high levels of emotional exhaustion, and 64% reported that they experienced low level of depersonalization. About half of the case managers reported low level of personal accomplishment.

The multiple regression analysis showed that organizational factors accounted for 73% of the variance in emotional exhaustion, 40% in depersonalization and 30% in personal accomplishment. Client and personal factors provided very low explanation for three aspects of burnout syndromes. Further, step-wise multiple regression analysis indicated that role stress, opportunity for promotion and job satisfaction variables emerged as significant predictors of emotional exhaustion. Depersonalization was significantly predicted by self-esteem, role conflict, opportunity for promotion, and job satisfaction. Personal accomplishment was significantly predicted by years of experience in human services, self-esteem and job satisfaction. Job satisfaction was the only variable that emerged as a significant predictor of all three dimensions of the burnout. The implication for prevention and alleviation of burnout problem among case managers are discussed.

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ASSESSMENT, CASE MANAGEMENT AND OUTREACH WITH DEAF ELDERLY: THE CHANGING CONTEXT OF CARE SENSITIVE TO THE HEARING IMPAIRED

K. Baril, M.S.W. and T. Pastorello, Ph.D., Syracuse University, School of Social Work, Syracuse, New York, 13244.

What are the hearing impairment needs of older deaf adults? This question opened a needs assessment survey of the deaf elderly in a region of upstate New York. The focus of the study, however, quickly became not only those needs specific to hearing impairment. It was clear to community social work professionals and the deaf primary researcher of this piece that hearing impairment informs and pervades all aspects of psychosocial assessment and case management. Therefore, the greater question guiding this study became: What are the constellation of comprehensive needs characteristic of older deaf adults?

In-depth interviews with purposively selected practitioners of diverse background, including deaf professionals, were content analyzed to address these research questions. Qualitative data analysis, using artificial intelligence software PROLOG, helped discover patterns which indicate a linkage between awareness of and access to a comprehensive set of social services for all elderly, on the one hand, and level of hearing impairment, on the other hand – a pattern which disadvantages the deaf elderly.

Practice implications are drawn for sensitivity training among needs assessment researchers and direct practice professionals who work with the deaf elderly. Indirect practice recommendations are made for special community outreach strategies with older deaf adults.

THE ROLE OF THE ASSESSMENT PROCESS AND INSTRUMENT DEVELOPMENT WITHIN CONSUMER-DIRECTED CARE PROGRAMS

R. Lando, M.S., J. Berman, Ph.D., S. Goldman, M.P.H., J. Chin, B.A. New York City Department for the Aging, 2 Lafayette Street, New York, New York 10007.

The assessment process is an integral component of home and community-based services. The degree of consumer participation in the assessment process varies greatly between traditional models and consumer-directed models of home and community-based care. The New York City Department for the Aging conducted a qualitative study of nineteen consumer-directed home care programs throughout the country. Program administrators were asked a series of questions about the assessment process itself and the development of their program's assessment instrument. In addition, they were asked to submit copies of the instrument for content analysis. Results indicate that among consumer-directed programs assessment instruments range in scope from being a simple intake form to being a comprehensive evaluation of a client's cognitive and functional abilities. Moreover, programs exhibiting a greater degree of consumer direction were more likely to have a greater degree of consumer involvement within the assessment instrument. Issues to be discussed include the development of assessment instruments and program profiles. Examples of assessment instruments will be discussed.

VOLUNTEERS: THE "ANGELS" OF SUCCESSFUL NEEDS ASSESSMENTS

W.F.Laurie, H. Stone, U.S. General Accounting Office, Suite 800, 1244 Speer Blvd., Denver, CO 80204

Needs assessment are needed now more than ever before -- a new generation of older people are here and the Older American's Act has had its impact. New insights and new methods are needed. This paper will highlight how volunteers were used in a recent study, The Lorain County Needs Assessment (Helene Stone, Principal Investigator) and an older study, the "Cleveland Study". The paper will describe the importance of volunteers in community needs assessments and our future dependency on volunteers for needs assessment because of the dramatic impact of changing grant requirements caused by new governmental performance measures. For example, The Lorain study was unique in that volunteers -- over 100 -- were used for interviewing respondents, composing of advisory panels, and use of focus groups. The impact on funding was dramatic -- only $20,000 was required for a survey of 347 respondents, 54 focus group participants, and 66 providers. Similarly, the Cleveland study had over 100 agencies participating and a pool of volunteer language interpreters for 15 different languages used by over 1,500 respondents surveyed. Volunteers made these surveys a success. The trend for the future will be volunteers. The paper will highlight how the volunteers were used and their contribution to the success of the surveys.

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Time On Earth

One (51 minute)/color videotape/1997
Co-produced by Enigmatico Films, Inc and the National Film Board of Canada.

This intimate video portrait captures the lives of three retired seniors as they travel the highways of North America in their motorhomes. The film follows 74 year-old Jack, 66 year-old Charmaine and 64 year-old Dorothy on a contemplative journey. As the odometer clicks off the miles on the road, important events in each of their life stories are revealed, until finally a picture is drawn of the forces that have shaped them. Powerful and at times painful insights are disclosed as each character reconciles the outcome of their lives.

Contact: James Vanden Bosch, Terra Nova Films,
9848 S. Winchester Ave., Chicago, IL 60643
800.779.8491; FAX: 773.881.3368;
e-mail: jvb@terranova.org

Flowers For Charlie

One (11 minute)/color videotape/1996
Produced by Mark Heller Wade

Charlie, in his early seventies, boards the local bus one morning and ushers in a sense of cheer and warmth that soon engages many of the other riders. His open friendliness brings a refreshing change in a world of isolation and self-protection, and his cheer has a winsome effect on the other passengers.

Laced with humor, ***Flowers for Charlie*** builds quickly to a surprising and emotive climax, as Charlie's fellow travelers "do unto Charlie as he has done unto them."

Intended for general audiences and students, ***Flowers for Charlie*** will entertain and inspire at the same time. It will also trigger discussion. As an elder role model, Charlie's character presents an empowering image of older adulthood.

Contact: James Vanden Bosch, Terra Nova Films, 9848 S. Winchester Ave., Chicago, IL 60643 800.779.8491; FAX: 773.881.3368; e-mail: jvb@terranova.org

BUBBEH LEE & ME
One (35 minute)/Color videotape/1996
Produced & Directed by Andy Abrahams Wilson

Both personal and universal, this documentary is a hilarious portrait of an extraordinary, ordinary Jewish grandmother and a touching account of her gay grandson's search for his place in the world. As the two of them take daily excursions to the supermarket, *kibbitz* over blintzes on Rosh Hashanah and avoid meddling matchmakers, the strength and meaning of their relationship emerge. A spirited reflection on family, culture and identity, BUBBEH LEE & ME examines the legacies passed through generations and shows that the journey of self-discovery can begin at any age.

Entertaining and instructional, BUBBEH LEE & ME was nominated for a national Emmy award, received a CINE Golden Eagle, and won "Best Documentary Short" at the Silver Images Film Festival.

Contact: Open Eye Pictures, 91 Seward Street, San Francisco, CA 94114; (415) 552-5735

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Ethics in the Home and the Community: Feminist, Narrative, and Theological Approaches

M. Holstein, D. McCurdy (The Park Ridge Center for the Study of Health, Faith, and Ethics, 211 East Ontario Street, Suite 800, Chicago, IL 60611)
M. Waymack (Loyola University, Chicago, IL 60626)
P. Mitzen (Council for Jewish Elderly, Chicago, IL 60645)
R. Moody (Brookdale Center on Aging, Hunter College, New York, NY 10010)
J. Tronto (Hunter College, CUNY, New York, NY 10021)

Home and community-based care for the elderly is among the fastest growing sites of care; it is also among the least understood in terms of the ethical problems it presents. These problems must be analyzed from multiple perspectives: the client, the family, the "formal" caregiver, the agency, and the community each may see and understand the problem differently. Resolution involves these many players. Problem resolution must also be set in a policy framework. Each of these factors plus the setting, the way in which ethical problems merge with life style issues, the habitual ways that each of the parties have of relating to one another, and the invisibility of many of the factors that shape or influence the way problems are played out, suggests that conventional forms of ethical analysis do not provide sufficient guidance for action. Using "cases," each presenter will introduce the conceptual framework they will be using to address the "case." Participants will then discuss the case from these respective points of view and will conclude with recommendations about a workable mechanism to address these issues in the community.

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NIA SYMPOSIUM: RESEARCH INITIATIVES, FUNDING AND TRAINING OPPORTUNITIES AT THE NATIONAL INSTITUTE ON AGING.

R.J. Hodes (National Institute on Aging, Bethesda) Introduction and Overview
Participants:
H.R. Warner (National Institute on Aging, Bethesda) Biology of Aging
E.C. Hadley (National Institute on Aging, Bethesda) Geriatric Program
M. Morrison-Bogorad (National Institute on Aging, Bethesda) Neuroscience and Neuropsychology of Aging
D.L. Longo (National Institute on Aging, Bethesda) Intramural Research Program

The National Institute on Aging conducts and supports biomedical and behavioral research with a focus on understanding basic processes of aging, improving prevention and treatment of diseases and conditions common in later years, and enhancing the health of older persons. The NIA also supports training and career development of scientists focusing on aging research and the development of research resources. The symposium will provide an overview of research initiatives and funding and training opportunities at the NIA, and will also provide an opportunity to ask questions and meet with representatives of relevant program areas.

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REVIEW OF ADVANCES IN GERIATRIC PSYCHOPHARMACOLOGY

G.J. Kennedy, Montefiore Medical Center, 111 East 210th Street, Bronx NY 10467

Participants:

R. A. Martinez (Janssen Pharmaceuticals, NJ 08560-0200) Atypical antipsychotics

C.A. Smyth (Montefiore Medical Center) Revisiting our "roots": botanicals and antioxidants for dementia and depression

J.E. Streim (University of Pennsylvania, Philadelphia, PA 19104) New antidepressants and antipsychotics: differences relevant to aging and physical illness

G.J. Kennedy (Montefiore Medical Center) The palliation of impaired memory; into the era of cognitive enhancers

Discussant:

I. Katz (University of Pennsylvania, Philadelphia, PA 19104)

Recent advances in the pharmacologic treatment of late life mental illness provide a complicated array of burdens and benefits for patient and prescriber. As a result psychopharmacology is approaching the threshold which oncological and cardiovascular pharmacology passed a decade ago. Yet within this emerging golden era of useful medications, clinical art exceeds the scientific research on which the use of the newer agents is based. Controlled studies offer limited guidance to the busy practitioner who cares for the average older patient rather than the exceptional person who meets entry criteria for clinical investigation. Older persons use a variety of prescriptions, vitamins, and botanicals whose interactions with the newer psychotropics remain uncertain. With increased utility comes increased complexity, requiring a greater level of collaboration between patient, family and the entire care team. In summary the use of medications to treat mental disorders in old age is now far more promising but much more challenging.

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MAKING THE MOST OF EPIDEMIOLOGIC DATA ON AGING: NEW QUANTITATIVE METHODS FROM THREE CURRENT STUDIES

K. Bandeen-Roche, Department of Biostatistics, School of Hygiene & Public Health, Johns Hopkins University, 615 N. Wolfe St., Baltimore MD 21205.

Participants:

G. Izmirlian, J. M. Guralnik, T. Rantanen, & L.P. Fried (National Institute on Aging—NIH, Bethesda, MD 20892) Evaluating the Validity of Short-Term Change in Physical Performance Measures: Results from the Women's Health and Aging Weekly Substudy.

B. Johnson (Johns Hopkins University, Baltimore) Ordinal Logistic Regression for Repeated Functioning Measurements.

E. S. Garrett & S. L. Zeger (Johns Hopkins University, Baltimore) Methods for Defining Summary Variables of Disability.

Y. Barron, L. Caulfield, K. Bandeen-Roche, & S. K. West (SOM and SHPH, Johns Hopkins University, Baltimore, MD 21287) Statistical Shrinkage and its use in Correcting for Measurement Error.

Discussant:

K. Bandeen-Roche (Johns Hopkins University, Baltimore, MD 21205)

As our global population ages, well-designed strategies to meet and manage the needs of older persons are increasingly needed. Critical data for producing these are being generated by epidemiologic studies on aging, including: data on the natural history of disablement, data underlying large-scale interventions to prevent and delay disablement, and data to aid policy makers in designing and allocating services. Such data are inherently complex and present analytic challenges including: (1) repeated measures are necessary to study changing health as persons age and to appropriately account for baseline participant status, study selection, and dropout; (2) important constructs such as disability and disease burden are often represented by multiple self-reported responses, performance measures, and clinical tests; and (3) outcomes and risk factors both may be difficult to measure accurately and precisely. This symposium presents novel analytic strategies to cope with these challenges, seeking to obtain the most accurate and precise possible inferences from epidemiologic data on aging.

Specifically, this symposium presents application of cutting-edge statistical methods to research questions in three current epidemiologic studies on aging: the Women's Health and Aging Studies I and II, and the Salisbury Eye Evaluation. It reports on work on assessing functioning trajectories using two types of longitudinal data: (1) single outcomes measured many times (weekly) over a six-month period, and (2) multiple ordinal (e.g., difficulty rating) responses tracked jointly over a few study evaluations. It also proposes new methods to achieve optimal balance between simplicity and specificity for determining various risk factor influences in summarizing self-reported functioning data. Finally, it reports on strategies to improve inferences about risk factor effects on health outcomes in situations where risk factors are measured imprecisely, in an analysis of how older persons' diets associate with risk of cataract. By designing analytic methods that target the special complexities of observational data on aging, this work aims to optimize the substantial research investments being made by epidemiologic studies.

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EPIDEMIOLOGY OF DEMENTIA IN NEW ADMISSIONS TO 59 MARYLAND NURSING HOMES*

J. Magaziner, Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland, 660 W. Redwood Street, Baltimore, MD 21201.

Participants:

P. S. German (The Johns Hopkins University) Urgency of Dementia Research in Nursing Homes: History and Policy Implications.

J. Magaziner (University of Maryland, Baltimore) The Prevalence of Dementia in a Statewide Sample of New Nursing Home Admissions.

A. L. Gruber-Baldini (University of Maryland, Baltimore) The Utility of Cognitive Functioning Screening Measures in the Determination of Dementia.

B.A. Kaup, D. Lorek (University of Maryland, Baltimore) Prevalence of Depression in New Nursing Home Admissions with Dementia.

S.I. Zimmerman (University of North Carolina) The Relationship of Facility Characteristics to Outcomes for New Nursing Home Residents with Dementia.

L.C. Burton (The Johns Hopkins University) Health Care Use of Newly Admitted Nursing Home Residents, by Dementia Status.

Discussants:

T. Wetle (National Institute on Aging, Bethesda, MD 20892)

The care of persons with dementia is a formidable problem which is increasing in importance as the population ages. The nursing home is one of many sites used to care for this group. Most prior research in this area has been limited by methods used to ascertain dementia and by the small number of residents and facilities included. This symposium will present findings from a statewide sample of 2285 new admissions to 59 nursing homes in Maryland. Presentations will identify the scope of the problem, provide information on the prevalence of dementia in this new admission cohort using an expert panel method for ascertaining cases, examine the cognitive status of residents and the utility of cognitive screening in nursing homes, provide information on the prevalence of depression in residents with dementia, evaluate the relationship of facility characteristics to health outcomes for residents with dementia, and provide data on the health care use of new admissions with dementia. The historical context of this project and future directions for research in this area also will be discussed.

(*supported by NIA grants R01 AG 08211 and R29 AG 11407)

URGENCY OF DEMENTIA RESEARCH IN NURSING HOMES: HISTORY AND POLICY IMPLICATIONS.

P.S.German, Johns Hopkins University, Baltimore, MD 212005

The structure, organization and population characteristics of nursing homes are the result of multiple social and policy influences. There is the Social Security Act of 1935, aiming to close down infamous county poor farms; the need for diluted hospital care settings; demographic changes increasing numbers and proportions of older people thus insuring high numbers of dementing illnesses; and, the mental health act of the fifties overseeing the closing of large psychiatric hospitals. The combination and interaction of these forces have resulted in large proportions (between 20 to 70%) of demented individuals in the overall populations of nursing homes. In order to adapt, make changes, or develop new systems of care, it is essential that the understanding of the current situation be both refined and enlarged. Chief among outstanding questions are: positives and negatives of mixing demented and non-demented residents; differing care needs (including manpower requirements) of the two types of residents; ideal settings for demented individuals. To date, very little is known on these questions beyond small studies which are difficult to generalize. This statewide study addresses each of these issues and draws conclusions to strategies that are rational, possible and testable and will inform the crafting of appropriate policy.

THE PREVALENCE OF DEMENTIA IN A STATEWIDE SAMPLE OF NEW NURSING HOME ADMISSIONS.

J. Magaziner, Department of Epidemiology and Preventive Medicine, School of Medicine, University of Maryland, 660 W. Redwood Street, Baltimore, MD 21201.

The mental morbidity of persons entering a nursing home is a critical factor in defining the care individual residents require; the implications of having large numbers of persons with dementia in nursing homes are far reaching. Despite the importance of this issue, we lack good estimates of the prevalence of dementia in new nursing home admissions. Prevalence estimates available range from 25-74% and derive from medical record diagnoses or studies of a small number of residents and facilities. Prior studies have not used standardized diagnostic criteria in large, representative samples of residents. This presentation will report on the prevalence of dementia in a random sample of 2285 first time admissions, age 65 and older, to 59 Maryland nursing homes, 1992-95. An expert panel consisting of two neurologists, two psychiatrists and a geriatrician reviewed information obtained from medical records and interviews with residents, families and staff to arrive at a diagnosis of dementia following DSM-IIIR criteria. Using this strategy, the prevalence was 48% (CI: 44%-53%). The prevalence was higher among those who were older, non-white, married, and poorly educated, and those with more ADL impairments ($p < .05$). The prevalence did not differ by number of comorbidities present at admission. The implications of using this method to study the nursing home experience of persons with dementia will be discussed.

THE UTILITY OF COGNITIVE FUNCTIONING SCREENING MEASURES IN THE DETERMINATION OF DEMENTIA.

A.L. Gruber-Baldini, Department of Epidemiology & Preventive Medicine, University of Maryland School of Medicine, 660 W. Redwood St., 213 HH., Baltimore, MD 21201-1596.

This presentation will examine the utility of standardized cognitive functioning screening measures for the determination of dementia. In this sample of 2285 new NH admissions, the expert panel determined that 48% had dementia. Cognitive information included the Mini-Mental State Examination (MMSE), the PGDRS Orientation Scale as rated by the nurse, the Blessed Changes in Everyday Activities Scale and items from the Jorm history of decline measure provided by the significant other (SO), and reports of dementia diagnosis from the SO. The study also included measures from the Minimum Data Set (MDS) which were not available to the panel. Prevalence of cognitive impairment in this new admissions cohort ranged from 44.4%-69.3% using cognitive screening measures. Scores on the MMSE had the highest prediction of panel determination of dementia (57% of variance), but only 1392 (61%) of the residents provided a MMSE. The correlation between the cognitive measures from the three sources (resident, nurse, SO) ranged from .29 to .63, indicating a lack of total agreement among sources. Diagnosis of dementia was 28.1% from SO report and 35.1% from MDS. Measures from the MDS and diagnostic information from the SO also did not correspond any better with the panel determination. Results suggest that the panel used a more hierarchal decision making approach which balanced incongruities between different sources and types of information and included other variables (e.g., stroke, education) to weight that information.

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PREVALENCE OF DEPRESSION IN NEW NURSING HOME ADMISSIONS WITH DEMENTIA

B.A. Kaup, D. Loreck, Department of Psychiatry, University of Maryland School of Medicine, Baltimore, MD 21201.

As part of a study examining dementia status in 2285 new nursing home admissions in the state of Maryland, two depression screens were utilized: the 30-item Geriatric Depression Scale (administered to the resident) and the Cornell Scale for Depression in Dementia (adapted for administration by lay interviewers and given to the nursing staff). The GDS was completed by 54.3% of the subjects, and the Cornell was completed for 82.7%. Demographic break-downs were similar for the subjects that completed each of the scales. Using cut-points indicative of depression, 25.9% of residents who completed the GDS scored 14 or greater, and 17.1% of residents for whom the Cornell was completed scored 8 or greater. In those determined to be demented through the expert panel process, 17.3% scored 8 or greater on the Cornell. When the demented group was divided by score on the MMSE, for those scoring 16-23 there were 11.8% who scored >8 on the Cornell, while for those scoring less than 15 approximately 15.5% scored >8. For both the Katz ADL scale and a derived scale for the number of comorbidities, the frequency of depression tended to decrease with more physical impairment, suggesting that nursing home staff may not rate as much depressive symptoms in the more impaired group. In summary, the use of the GDS and the Cornell indicate significant depressive symptomatology in this cohort of new nursing home admissions, with 22.3% of the non-demented scoring 14 or greater on the GDS, and 17.3% scoring 8 or more on the Cornell in the demented group.

THE RELATIONSHIP OF FACILITY CHARACTERISTICS TO OUTCOMES FOR NEW NURSING HOME RESIDENTS WITH DEMENTIA

S.I. Zimmerman, Institute on Aging, The University of North Carolina, Chapel Hill, NC 27599.

The extent to which facility characteristics relate to mortality, morbidity, health care use and change in cognition, functioning and behavior for demented residents during the year following admission to a nursing home (NH) is not known. This information is needed to provide the most appropriate care for these residents. A comprehensive assessment of which facility characteristics are associated with better outcomes can inform health care policy and provide direction for long-term care regulations.

To address this aim, this study obtained comprehensive observational and interview information regarding the structure and process of care in 59 NHs (e.g., physical and social environment, staffing, programming). Baseline results indicate that the prevalence of dementia was almost three times higher in small NHs (fewer than 50 beds) than in large facilities (more than 200 beds; OR = 2.89, 95% CI = 1.63, 5.14). The prevalence also was 40% - 50% higher in independently-owned facilities (OR = 1.38, 95% CI = 1.17, 1.63) and in urban areas (OR = 1.56, 95% CI = 1.24, 1.95). Outcomes in medical morbidity and health care use for 1064 demented residents admitted to the NH, and in cognitive, functional and behavior change for 475 demented residents surviving in the NH at one year, varied by the structure and process of care.

HEALTH CARE USE OF NEWLY ADMITTED NURSING HOME RESIDENTS, BY DEMENTIA STATUS.

L.C. Burton, Johns Hopkins University, 624 N. Broadway, Baltimore, MD 21205.

Reduced capability of a person with dementia to describe symptoms of incipient disease may lead to development of symptoms into episodes requiring emergency room use and/or hospital admission. This question was tested using follow-up data from a cohort of 2155 residents newly admitted to one of 59 nursing homes in Maryland. Medical visits within and outside the nursing home were obtained from chart review at two years. Number of visits were adjusted for the length of stay in the nursing home and are reported for one year. Means reported were controlled for age, race, gender, marital status, education, ADLs, and number of comorbidities at admission. Dementia status was ascertained by expert panel.

Residents with dementia compared to residents without had more emergency room visits (0.8 vs 0.6, NS). However, residents with dementia had fewer medical visits in the nursing home, (30.8 vs 49.0, $p < .001$); fewer medical visits outside the nursing home (1.9 vs 5.2, $p < .001$); and fewer hospitalizations (0.8 vs 1.4, $p < .05$).

The lower level of health care use has implications for cost and care of nursing home residents with dementia.

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PAN AMERICAN CONGRESS ON GERONTOLOGY AND GERIATRICS: A FORUM FOR INFORMATION AND TECHNOLOGY TRANSFER IN THE AMERICAS.

R. McCarter, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284.

Participants:

N. Sayeg (Brazilian Geriatric Society, Sao Paulo) Achievements and Tradition of the Pan American Congress.

M. Pelaez (Pan American Health Organization, Washington) Demographics of the Elderly in the Americas.

G. Roth (Gerontology Research Center, NIA, Baltimore) Frontiers of the Biology of Aging: The View from Texas and Beyond.

Discussants:

R. Fisher (University of Toronto, Canada)

J. Sykes (Madison, WI)

The accelerating need for international exchange of ideas, information and technology related to aging and the elderly will be the focus of this symposium. For the next millennium an important goal of society will be to meet the challenge of ever-increasing numbers of the elderly throughout the Americas. Strategies to address this goal will be the focus of the next Pan American Congress on Gerontology and Geriatrics, to be held in San Antonio, Texas from February 21-24, 1999. This Congress is sponsored by the IAG, GSA, CGA, PAHO/WHO, NARC, COMLOT and the gerontology and geriatric societies of virtually every country in the Americas. The Pan American Congress has a history of providing a successful forum for the exchange of ideas and technology related to every aspect of aging, from basic biology to clinical medicine and social policy. Participants will address: goals and achievements of the 1995 meeting in Sao Paulo, Brazil; plans to identify current demographic trends in the elderly throughout this hemisphere; frontiers of knowledge regarding the basic biology of aging utilizing the considerable resources of gerontologists and geriatricians in Texas and from other regions also. Discussants will provide insight into plans for identifying the diversity of current clinical and social conditions and strategies to improve the quality of life of the elderly. They will also identify, in "images of aging", the realities of being old in the very different countries of this hemisphere.

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PSYCHOANALYTIC TREATMENT OF DEPRESSION IN THE ELDERLY. Moderator: Sheldon S. Tobin, Ringel Institute of Gerontology, University at Albany - SUNY, Albany, NY 12203 Presenter: Jerome Grunes (Chicago Institute for Psychoanalysis).

Cases will be presented to illustrate a variety of kinds of depressions and their psychoanalytic treatment among the elderly. Too often the focus on treatment of depressions in the elderly is based on loss as the etiology, followed by cognitive treatment. Yet there are other kinds such as obsessive-compulsive patients who were not depressed in their earlier years but become depressed in their later years. Also depression is often the presenting symptom in a person with a serious but not yet evident disease.

Discussants: Sheldon S. Tobin and David Gutmann, Northwestern Medical Center.

Ample time will be allowed for presentations of cases by members of the audience and for their active participation in the discussion.

(Sponsored by the Psychoanalysis and Aging Interest Group.)

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CAN GUIDELINES INFLUENCE PRACTICE BEHAVIOR? MODELS FOR IMPROVING THE QUALITY OF ALZHEIMER'S DISEASE CARE BY PRIMARY CARE PROVIDERS

J. C. Frank, UCLA School of Medicine, 10945 LeConte Ave, Suite 2339, Los Angeles, CA 90095-1687.

Participants:

D. Cherry, (Alzheimer's Association, Los Angeles) Managed Care for People With AD.

J. C. Frank, M. J. Pedroza, (UCLA, Los Angeles) The California Workgroup for Alzheimer's Disease Management Guidelines Project.

R. Guttman, (American Medical Association, Chicago) Continuing Care Guidelines for the Management of AD.

D. Saliba, B. Mittman, D. Lang, B. Vickrey, (Center for the Study of Healthcare Provider Behavior) Implementation of AD Care Guidelines in California

Discussants:

K. Maslow, (Alzheimer's Association, Washington, D.C.)

P. Rabins, (Johns Hopkins Hospital, Baltimore, MD)

Alzheimer's Disease (AD), or a related disorder, affects up to 10% of the 65+ population and as many as 47% of people over age 85. Physicians and other primary care providers receive little or no preparation to provide the comprehensive care required by this patient population. Care guidelines have been developed for AD diagnostic assessment and specialty care. Rather than bridging the training gap, care guidelines have had amazingly little impact on physician practice behavior. Several guideline initiative efforts are currently underway that recognize guideline adoption barriers and incorporate implementation and practice behavior change strategies into their plans. This symposium will feature three such projects as models: the AMA "Continuing Care Guidelines" project, the "Managed Care for People with AD" Alzheimer's Association - Kaiser Permanente project and the "California Workgroup on AD Management Guidelines Project". Each project discussion will feature its development, planning process, guidelines model, dissemination plan, behavior change strategies and evaluation. Discussants are specialists in physician AD guideline development and AD health policy. Participants will gain a thorough understanding of barriers to physician adoption of practice guidelines and methods of guideline development that focus on maximizing guideline adoption and utilization.

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MODERATE EXERCISE IMPROVES DISABLED ELDERS' GAIT STABILITY

D.E. Krebs, A.M. Jette, S.F. Assmann. Roybal Center Consortium, Boston University, Boston, MA 02215.

Background: Decreased muscle strength impedes elders' functional performance in daily activities such as gait. The mechanisms whereby increased strength improves gait are unknown. **Methods:** We conducted a prospective, blinded, randomized trial of moderate intensity strength exercise and measured its impact on functional mobility during gait in 132 functionally limited elders. 120 subjects (X= 75.1 years old) completed 6 months of elastic band resistance training at least 3 times per week or served as no-exercise controls. **Results:** Subjects increased their hip abductor, hip extensor and knee extensor strength by 17.3% and 6.6% in the exercise and control groups, respectively. Functional gait factors improved significantly more in the exercise group than the control group ($p<.05$). Forward gait velocity increased 5 and 3 cm/sec in the exercise and control groups, respectively ($p<.05$ by univariate analysis, ns by multivariate analysis) but most gait changes were in mediolateral control. Peak mediolateral velocity and base of support improved in the exercise group, but not in the controls. Change in lower extremity strength correlated significantly but weakly with many of the gait variables. **Conclusions:** Gait stability, especially in mediolateral steadiness, improved in the exercise but not the control group. We conclude that even moderate strength gains benefit gait performance in elders, and thus provide a sound basis for encouraging low-intensity strength training for elders with functional limitations.

TREADMILL EXERCISE TRAINING IMPROVES PHYSIOLOGIC FITNESS RESERVE FOLLOWING HEMIPARETIC STROKE.

R.F. Macko, G.V. Smith, K.H. Silver, C.L. Dobrovolny, A.P. Goldberg. Baltimore VA GRECC, U of Maryland Departments Gerontology, Neurology, and Physical Therapy, Baltimore, MD 21201

Advancing age and physical deconditioning compound the neurologic disability following stroke, compromising patients' tolerance for the high energy costs of hemiparetic gait. We determined whether regular (3X/week) treadmill aerobic exercise improves peak fitness, while lowering the energy costs of walking in 21 patients aged 67 ± 7 yrs (mean ± SD) with chronic hemiparetic gait following remote ischemic stroke (>6 months). Peak cardiovascular fitness ($V0_2$ peak) and oxygen consumption during a standard submaximal effort treadmill task (economy) were measured by open circuit spirometry before and after 3 months training. Training produced a significant increase in peak $V0_2$ (16 ± 3.5 vs 17.2 ± 4.4, ml/kg/min, $p<0.03$) while reducing $V0_2$ required to perform the standardized submaximal effort treadmill walking task (9.2 ± 1.7 vs 8.6 ± 1.35 ml/kg/min, N=19, $p=0.002$). Following training, stroke patients required 18% less of their peak exercise capacity (fractional utilization $V0_2$ submax − peak $V0_2$) to perform the same submaximal walking task (59 ± 15.2 vs 48.3 ± 15.6%, $p<.003$). In conclusion, task-oriented aerobic exercise improves physiologic fitness reserve in older hemiparetic stroke patients, enabling ambulatory activities of daily living to be performed at a lower percent of the peak cardiovascular fitness capacity.

EFFECTIVENESS OF A PHYSICAL ACTIVITY PROMOTION PROGRAM FOR SENIORS (CHAMPS)

A. Stewart,[1] C. Verboncoeur,[1] B. McLellan,[1] D. Gillis,[1] S. Rush,[1] A. King,[2] K. Mills,[1,2] P. Ritter,[2] W. Brown,[2] and W.M. Bortz, II[3]. [1]University of California San Francisco, IHA, Box 0646, San Francisco CA 94143-0646; [2]Stanford University, [3]Palo Alto Medical Foundation

Physical activity contributes in important ways to the health, functioning, and quality of life of older adults, yet, nearly ¾ of older adults in the U.S. are underactive. A randomized controlled design was used to evaluate a 1-year community-based program to increase physical activity in underactive seniors by participating in community classes or home-based exercise. The program was individually tailored and included a personalized planning session, regular telephone contact, exercise booklets, activity logs, and monthly workshops and newsletters. 173 Medicare HMO members were randomized (33% of eligible); 9 (5%) were lost to follow-up (died/dropped). Age ranged from 65-90 years (M=74); mean education was 15.2 years; 66% were female and 8% were an ethnic minority. Using repeated measures ANCOVA, adjusting for age and sex, there was a time by group interaction for calories expended per week ($F=4.55$, $p < .05$) and activity frequency per week ($F=6.70$, $p < .01$). Post-hoc tests indicated that the groups differed significantly at 6 months and 1 year (p values $<.05$); the intervention group increased steadily over the year. In within-group analyses at 1 year, the intervention group increased weekly caloric expenditure by 502 calories ($p < .01$) compared to a 102 calorie increase in the control group (ns); the intervention group increased weekly frequency of exercise by 3.7 times ($p < .01$) compared to .8 times in the control group (ns). The effect on both outcomes was similar for women, older subjects, the sedentary, and the overweight. We conclude that CHAMPS was successful in increasing physical activity and may be useful in other HMO and community settings. (NIA AG09931)

EFFECT OF EXERCISE THERAPY ON QUALITY OF LIFE IN OLDER PATIENTS WITH INTERMITTENT CLAUDICATION

B.A. Bartman, Bradham D.D., Sorkin J.D., Weissman J., Hochberg M. GRECC, Maryland VA Health Care System, Baltimore, MD 21201.

We examined the effects of a 6-month course of aerobic exercise therapy on quality of life (QOL) in patients with intermittent claudication, a condition characterized by leg pain that occurs with walking. Patients were randomized to an exercise therapy group (n=20) or a usual care group (n=17). We used the Medical Outcomes Study Short Form-36 (MOS SF-36) to assess QOL. The MOS SF-36 measures eight domains of health including physical functioning (PF), role limitations due to physical problems (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role limitations due to emotional problems (RE), and mental health (MH). Scores range from 0-100 with higher scores indicating better health. Scores were obtained at baseline and at six months. Comparisons were made between baseline and 6-mo scores within groups. Power analysis indicates that continued enrollment will provide the sample size to detect significant differences in changes in scores between groups. With the exception of social functioning, domain scores at baseline were lower than age-adjusted population norms for both groups. Significant improvements in mental health scores (baseline mean=76.8, 6-mos mean=80.3, $p<0.04$) and bodily pain scores (baseline mean=56.9, 6-mos mean=69.2, $p<0.05$) were observed for the exercise group. No significant changes in domain scores were noted for the usual care group. In summary, a 6-mo course of aerobic exercise therapy improves QOL in older patients with intermittent claudication by reducing the severity of bodily pain and reducing psychological distress.

THE EFFECT OF PHYSICAL ACTIVITY ON MORTALITY, NURSING HOME UTILIZATION, HOSPITALIZATION, AND DEPRESSION IN OLDER ADULTS

T.M. Damush & G.L. Gildengorin Health Services R & D (11H)Roudebush VAMC, 1481 W. 10th St., Indianapolis IN 46202 & Indiana University, Department of Medicine, Buck Center for Research in Aging, Novato, CA 94945

As the proportion of older adults increase, strategies that decrease the prevalence of morbidity and premature mortality would be valuable. The purpose of this study is to determine the effect of the frequency of physical activity participation on mortality, nursing home utilization, hospitalization, and depression. An age-stratified sample of 1,417 community-dwelling adults ages 55 and older were studied longitudinally in 1989-1991 and 1992-1995. Interview items included medical history of diseases and chronic conditions, demographics, and life-style characteristics including physical activity participation which was defined as frequency of brisk walks, physical recreation, and exercise. Multiple regression analyses revealed that after controlling for baseline demographics, disease, self-rated health, smoking status, alcohol use, depression, and bmi, less frequent physical activity participation at baseline was a significant independent predictor of mortality 4 years later. Physical activity participation frequency did not predict nursing home utilization, hospitalization or depression. This suggests that physical activity for community-dwelling older adults may be worthwhile for longevity.

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THE IMPACT OF ACUTE PHYSICAL THERAPY ON HIP FRACTURE OUTCOMES IN THE ELDERLY

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The current financing environment has resulted in rehabilitation being offered through an array of acute and postacute programs. As a result, the timing of the initiation of physical therapy (PT) following acute hip fracture varies considerably between patients. The aim of this study was to determine the contribution of PT initiated in the acute hospital to selected outcomes following hip fracture as the patient moves from acute to postacute care.

The sample consisted of 229,585 hip fractured patients (mean age=83 years, 80% female, 95% White) identified in the Medicare fiscal year 1995 MEDPARS database. The MEDPARS data were merged with the Provider Specific File, the Inpatient Cost Report File, and the Skilled Nursing Facility Minimum Dataset to identify demographic, clinical, organizational, and cost variables that may influence PT use and outcomes. Logistic regression models were fitted for the following dependent variables: acute PT use, acute PT intensity, discharge destination from the acute hospital, PT use in the SNF, and discharge destination from the SNF. The results indicated that patients who receive PT in the acute hospital are more likely to be discharged to home than to a SNF or rehabilitation facility (OR=1.54). A patient who receives acute PT and is discharged to a SNF is more likely to receive SNF PT (OR=3.79) and to be discharged to home (OR=1.83). We conclude that PT initiated in the acute hospital results in better discharge outcomes as the patient moves through the continuum of care. In addition, early initiation of PT could result in better case management of patients requiring rehabilitation. Supported by the Foundation for Physical Therapy.

RACIAL DIFFERENCES IN PRESSURE ULCER INCIDENCE AMONG ELDERLY SURGICAL PATIENTS. Mona Baumgarten (Dept. of Biostatistics & Epidemiology, U. of Pennsylvania, Philadelphia PA 19104-6021), D. Margolis, J. Berlin, J. Carson (U. of Pennsylvania and U. of Medicine & Dentistry of NJ).

Little is known about racial differences in pressure ulcer incidence. The goal of this study was to compare elderly African Americans and Caucasians with respect to their risk of hospital-acquired pressure ulcers. A secondary analysis was performed using data from a retrospective cohort study on surgical blood transfusion. Data were abstracted from the medical records of patients aged ≥60 years undergoing surgical repair of hip fracture at 20 US hospitals from 1983 to 1993. The mean age of patients was 80.2 years; 78.7% were women. Among 8,123 Caucasian patients who had no pressure ulcers at admission, 8.5% had a pressure ulcer at discharge; among 683 African Americans, the incidence was 14.6%. The odds ratio (OR) comparing African Americans to Caucasians was 1.92 ($p<0.0001$). In a logistic regression model that adjusted for multiple patient-level risk factors, the OR for the race variable changed only slightly, to 1.82 ($p<0.0001$). However, adjusting for study hospital caused the OR to decrease to 1.33 ($p=0.0518$). These results suggest that, overall, elderly African American surgical patients have a higher risk of hospital-acquired pressure ulcers than Caucasians and that hospital-level factors are important in explaining this difference.

FUNCTIONAL OUTCOMES OF ELDERLY PATIENTS FOLLOWING INTENSIVE CARE

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Both age and probability of benefit have been suggested as criteria for rationing of health care resources. Previous studies of the effect of age on outcome from critical illness have been inconclusive. The purpose of this prospective descriptive correlational study was to assess the impact of age, gender, frailty, illness severity, and comorbidities on physical function at the time of admission to intensive care, and at one-month and three-month post-hospital discharge intervals. Study subjects (N = 104), drawn from three ICUs, ranged in age from 65 to 95 years. Measurement of variables was carried out using Katz's ADL, the APS of the APACHE II, the Charlson Comorbidity Index, and the MOS SF-36. Discussion focuses on closing the information gap surrounding elderly patients' outcomes following ICU treatment, and challenging negative assumptions about health characteristics of elderly ICU patients. Through review of quantitative and descriptive findings, this study raises questions about whether age alone is a sufficient criterion for rationing of intensive care.

Funded by Sigma Theta Tau International; Sigma Theta Tau Iota Kappa Chapter; Sigma Theta Tau Epsilon Xi Chapter; American Nurses Foundation.

FUNCTIONAL OUTCOME PREDICTORS FOR HIP FRACTURED ELDERS. K.S. Feldt, H. L. Oh, School of Nursing, University of MN, 508 Harvard St. S.E. Mnpls. MN 55455.

Research indicates that older, cognitively impaired, hip fracture patients have poor functional outcomes and high risk for institutionalization. This study examined the relationship between cognitive status, pain report and pain treatment in the hospital, and functional outcomes at two months postoperatively for a sample of 99 elderly hip fracture patients (50 cognitively intact, and 49 cognitively impaired) who had been independent ambulators (with or without device) prior to fracture.

Cognitively impaired subjects were significantly older ($\bar{x}$ age 88.1 vs. 82.8 yrs, $p < .001$) and significantly more likely to use a walker or cane prior to the hip fracture. Verbal pain report did not differ significantly between the groups, but reported pain with movement was significantly higher than pain at rest for all subjects. Regression analysis revealed that mental status, pain report with movement, severity of illness and age accounted for 51% of the variance in functional outcome at 2 months post-operatively. Prior use of cane or walker, amount of analgesics received in the first and second 48 hrs postoperatively did not reach .05 limits for stepwise entry into the regression analysis. Conclusion: Age, mental status, severity of illness, and severity of pain contribute to poorer functional outcomes at 2 months post hip fracture. Efforts to reduce pain severity in both impaired and intact elders may yield better functional outcomes.

MEDICATION EDUCATION OF ACUTELY HOSPITALIZED OLDER PATIENTS. S.M.H. Alibhai, R.K. Han, G. Naglie. The Toronto Hospital, University of Toronto, Toronto, Canada.

The objectives of this study were to determine the time spent providing medication education (ME) to older patients, its impact on pt. knowledge and satisfaction, and barriers to ME. Study methods involved a telephone survey of patients and an interviewer-administered survey of physicians and pharmacists. Patients 65+ yrs. of age regularly taking at least one medication who were admitted to the Internal Medicine ward in a tertiary care teaching hospital were enrolled. Patient demographics, medication use, time spent receiving/ providing ME, and satisfaction scores were analyzed. Forty-nine patients with a mean age of 77.1 yrs. reported that physicians spent a mean of 10.5 min. (range 0-60) and pharmacists spent 5.3 min. (range 0-40) providing ME. Twenty patients (51%) reported receiving no ME and only 13 (30%) reported receiving written medication instructions. When patients who reported receiving ME were compared with those who reported no ME, both groups had comparable baseline characteristics and made many medication errors. Most patients were quite satisfied with the ME received. Physicians identified no barriers to ME 49% of the time. Of those who identified any barrier (n=25), lack of time was the most common barrier (36%). Pharmacists cited lack of notification of discharge (41%) and lack of time (39%) as the main barriers. In summary, older patients received little ME and written information. Older patients with and without ME made a large number of errors. This suggests that further efforts are required to make physicians and pharmacists aware of older patients' needs and to educate older patients.

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A RANDOMIZED TRIAL TO INCREASE FLUID INTAKE IN NURSING HOME RESIDENTS. D. Kim MD, C.A. Alessi MD, J.F. Schnelle PhD, S.Edgar PhD, M.Mohr MPH; UCLA Borun Center for Gerontological Research and Sepulveda VA GRECC, 10833 Le Conte Ave, Los Angeles, CA 90095-1687.

Dehydration is a common disorder among frail elderly. The purpose of this study was to test whether an intervention involving encouragement to drink plus increased physical activity would increase fluid intake and affect several measures of hydration status in frail nursing home residents. 25 incontinent residents (65% female, mean age 86, 92% white) in one community nursing home were randomized to either intervention or control. Subjects in the intervention group participated in a two-phase program to increase fluid intake. During phase I of the intervention (24 weeks), subjects were offered fluid but not encouragement to drink was given. During phase II (8 weeks), subjects were offered their preferred fluid at least 8 times per day, with intensive encouragement to drink. There were no changes with phase I. At the end of phase II, intervention subjects had significantly increased their 24 hour fluid intake (measured over 3 days) compared to controls (MANOVA F=4.75, P=.048). Despite this increase in fluid intake, there was not a significant difference in serum osmolality, 24-hour urine output (measured directly and by weighing diapers), body weight, or orthostatic blood pressure measurement between intervention and control subjects at follow-up testing.

In conclusion, an intensive intervention involving encouragement to drink does increase fluid intake in frail, incontinent nursing home residents; but this improved fluid intake was not associated with improvement in commonly used measures of hydration status.

DRESSING OF NURSING HOME RESIDENTS WITH DEMENTIA. M.B. Holm (College Misericordia, 301 Lake Street, Dallas, PA 18612), J.C. Rogers (U of Pittsburgh), L.D. Burgio, D. Roth, E. Bodner (U of Alabama-Birmingham).

The effectiveness of prompts for reducing dependency in dressing was examined in nursing home residents with Alzheimer's dementia. The relationships between residents' dressing and caregivers' non-directive (e.g., verbal positive prompts), directive (e.g., gestural prompts), and physical prompts were examined by lag sequential analyses. The 84 subjects had a mean age of 82 years and MMSE of 6.07. Dressing was observed under conditions of Usual Care (5 days), Skill Elicitation (5 days), and Habit Training (15 days). Yule's Q statistics and repeated measures ANOVA were used to ascertain whether the onset of dressing and the continuation of dressing occurred for significantly greater proportions of sessions than expected, and whether the prompt-response linkage was significantly stronger for any particular phase.

Following non-directive prompts, the onset of dressing exceeded chance expectation in Usual Care and Habit Training, but not in Skill Elicitation. Following directive and physical prompts, the onset of dressing exceeded chance expectation in all conditions. For non-directive and directive prompts, the continuation of residents' self-dressing exceeded chance expectation for all conditions. The linkage between the onset of resident dressing following directive prompts was stronger in Skill Elicitation than Usual Care, and stronger in Habit Training than Skill Elicitation. For physical prompts the linkage was stronger in Usual Care than during Skill Elicitation or Habit Training. The linkage between non-directive and directive prompts and continuation of resident self-dressing was stronger in Skill Elicitation and Habit Training than Usual Care. The findings support the functional benefits that residents with dementia can derive from prompting, and suggest that residents' responses to prompts is greatest for directive prompts during rehabilitation-oriented sessions

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INCIDENCE OF NEW URINARY INCONTINENCE (UI) IN NURSING HOMES & FAMILIARITY OF STAFF WITH THE AHCPR UI GUIDELINE N.M. Watson, C.A Brink, J.G. Zimmer & E.R. Taillie School of Nursing, University of Rochester, Rochester, NY 14642.

Incidence of new UI was identified prospectively in 52 nursing homes (NH) (7,458 beds) over 3 months (mos). Preliminary findings indicated that 6.5 cases of new UI occurred for every 100 NH beds & 59% of these cases were appropriate & stayed long enough for application of the AHCPR UI Guideline to occur. Cases judged less appropriate included cases of transient UI (4%), those who left the NH (13%), died (10%) or were on comfort care (11%) within 12 wks of UI onset. Thus, 3.8 cases per 100 beds occurred over 3 mos that were clearly Guideline appropriate -- supporting the high applicability of the Guideline in NHs. Only 25% of medical directors were familiar with the recommendations of new (1996) UI Guideline, while only 15% of staff development coordinators, 13% of nurse managers and 9% of certified nursing assistants reported familiarity -- suggesting low application. Outcome of cases at 5 mos supports low application with little change in UI status. Only 9% had resolved UI, while 88% remained incontinent & 3% had left NH. CM-13

TUBE-FEEDING IN THE ELDERLY: THE DECISION-MAKERS' PERSPECTIVE.
S.L. Mitchell, F.Lawson Sister's of Charity of Ottawa Health Services and Division of Geriatrics, University of Ottawa, Ottawa, Ont. K1Y 4E9

Despite the fact that the medical benefits of long-term tube-feeding are uncertain, approximately 10% of institutionalized elderly are tube-fed. The factors which influence the decision whether or not to initiate long-term tube-feeding have never been studied. In order to better understand this decision-making process, we surveyed the substitute decision-makers (SDM) of all cognitively impaired, tube-fed patients over 65 years living in long-term care institutions in Ottawa. Of the 65 eligible respondents, 43 participated in the study. In the majority of cases (40/43, 93%) the initial tube-feeding decision took place in an acute hospital setting. Stroke was the most common diagnosis (29/43, 66%), followed by dementia (5/43, 17%). In most cases (27/43, 63%), the primary physician spent less that 15 minutes discussing the issue of tube-feeding with the SDM. Only half (23/43, 53.5%) of SDMs felt they received adequate support from the health care team order to make an informed decision. Most SDMs felt they understood the potential benefits (38/43, 88%), but not the risks (20/43, 46.5%) of tube-feeding. The most frequently cited benefits explained by the physician to the SDM were the prevention of aspiration (33/43, 77%) and the prolongation of life (36/43, 84%). It appears that a significant proportion of SDM's are inadequately supported and informed in the decision to start long-term tube-feeding. While SDMs felt they understood the potential benefits of tube-feeding, there is a lack of evidence to support the benefits presented to them. Better communication of evidence-based knowledge of the risks and benefits of tube-feeding is needed to improve this decision-making process.

Effects of a Performance Management Systems on Nurse Assistant (NA) Behavioral Skills. L.Burgio, A.Stevens, K.Burgio, P. Paul, & E. Capilouto, Center for Aging, Univ. of AL at Birmingham, 933 19th S. S., Suite 219, B'ham, AL 35294.

This paper presents findings from an NINR funded study that used a Performance Management system for motivating NAs to employ behavioral management skills. After inservice and hands-on training, a Formal Staff Management (FSM) system was implemented to encourage long term use of the behavioral skills. Seven nursing units within a large nursing home were randomly assigned to receive equivalent skills training and one of two management conditions: FSM (4 units) or Conventional Staff Management (CSM, 3 units) wherein supervisory staff continued to use their usual staff management system. An increased use of specific behavioral skills was found in both FSM (n=36 NAs) and CSM (n=27 NAs) units immediately after training. Specifically, the rate of two behavioral skills directly related to NA care routines increased following training: NA use of *one-step verbal prompts* ($p<.01$) and *verbalizations announcing physical assistance provided to residents* ($p<.0001$). NAs in both units also demonstrated a significant increase in the use of a five second delay between verbal instruction and the delivery of physical assistance (*one-step verbal prompts*, $p<.01$, and *verbalizations announcing physical assistance provided to residents*, $p<.0001$). As predicted, assessments at approximately 20 weeks after training indicated that NAs on the FSM units demonstrated higher rates of *one-step verbal prompts* ($p<.03$) and *verbalizations announcing physical assistance provided to residents* ($p<.001$) than NAs on the CSM units. NAs on FSM units were also more likely to enact a five second delay between verbal statements and the delivery of physical assistance ($p<.02$). Similar immediate and maintenance effects were found for NAs' positive statements to residents. (Repeated measure ANOVA used for all comparisons.)

Effectiveness of rehabilitation in nursing home patients.
Patrick Murray, (2500 MetroHealth Dr., Dept. PM&R, Case Western Reserve University, Cleveland, OH 44109); RD Cebul, ME Singer, LJ Russo, CL Thomas

The effectiveness of rehabilitation therapy (rehab) is difficult to estimate because of selection bias inherent in patient referrals for care. This study evaluates the usefulness of rehab in nursing home (NH) patients with medical diagnoses using propensity methodology to adjust for patient selection. The subjects were 52,143 patients without hip fracture, stroke, or amputation, first admitted to an OH NH during 1994-96. The sample is divided into those with congestive heart failure (30%) and those without. The Minimum Data Set Plus (MDS+), reported by all NHs quarterly, provided information on patient socio-demographics, diagnoses, comorbidities, functional status, and therapies. The principal outcomes were change in ADL score 3 months after admission, discharge to the community at 3 months, and survival. Propensity to receive rehab was developed using 74 MDS+ variables as predictors in a logistic model. Multivariable analyses were conducted to examine the association of rehab with the outcome variables, controlling for propensity and comorbidities. Community discharge (OR = 2.04 (CHF) and 2.07 (other), $p<0.0001$) was associated with the provision of rehab. Change in ADL score and survival in CHF were not. Survival was decreased in rehab patients with other medical diagnoses (RR=0.87, $p<0.0001$). Patients with medical diagnoses who receive rehab appear to be discharged to the community more frequently than those not receiving rehab. This study supports the usefulness of rehab services in this population. The lower survival in non-CHF patients receiving rehab requires further study.

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THE NON-PHARMACOLOGICAL MANAGEMENT OF AGITATION IN THE NURSING HOME. A CONSENSUS APPROACH.

SZ Nasr, MD•, D Osterweil, MD†. •Staff Physician, Amarillo Veterans Affairs Medical Center, Amarillo TX 79106. †Professor of Medicine and Geriatric Medicine, UCLA School of Medicine, Department of Geriatrics, Los Angeles, CA 90095.

OBJECTIVE--To provide health care providers with a consensus approach to interventions used to manage the agitated behavior commonly observed in demented elderly living in nursing homes. PARTICIPANTS--An interdisciplinary 10-member panel with expertise in the nursing home management of cognitively impaired elderly, representing the fields of geropsychiatry, geropsychology, geriatric medicine, neurobehavior and geriatric nursing. EVIDENCE--The literature was searched through MEDLINE and the INDEX MEDICUS producing a bibliography of references for the panel. Priority was given to articles based on scientific evidence rather than on clinical anecdotal experience. CONSENSUS-- Conclusions were based on the evidence presented and after a round-table discussion. CONSENSUS STATEMENT-- A draft statement was circulated to the panelists for revisions. CONCLUSIONS-- The manifestations of agitation are classified as physically aggressive, physically non-aggressive, verbally aggressive and verbally non-aggressive behaviors. Non-pharmacologic intervention strategies include sensory, behavioral and environmental approaches. The most useful treatment method varies with each subcategory of agitation and usually involves a combination of modalities. Optimal management requires comprehensive geriatric and psychiatric evaluations and periodic reassessments. Further research is needed to clarify the pathophysiologic etiologies of agitation and to determine the best therapeutic strategies.

Correlation between driving and functional status in patients with Alzheimer's Disease.

E. Comsti MD, J.R. Shua - Haim MD, J.S.Ross MD, Vered Shua-Haim RN BSN, J.Smith RN, MPA,
Meridian Hospital Corp.& UMD-SOM, Stratford, NJ.

PURPOSE: To investigate the correlation between functional and driving status of Alzheimer's patients.
METHODS: We evaluated all consecutive patients who were referred for a dementia evaluation. Patients included in the study fulfilled the NINCDS-ADRDA criteria for Probable Alzheimer's Disease (AD). Functional status was evaluated using the ADL (Activity of Daily Living)and IADL (Instrumental Activity of Daily Living) scales.
RESULTS: 152 patients were evaluated. 97 patients met the criteria of NINCDS-ADRDA(II)for Probable AD Mean ADL & IADL scores of patients who still drove were 8.3 & 13.4 with standard deviation of 2.2 & 3.2 respectively. Mean ADL & IADL scores of patients who were no longer driving were 10.3 & 19.9 with standard deviation of 3.7 & 4.5 respectively. According to Pearson correlation test, there was a high correlation between ADL (p =0.02) and IADL (p = 0.00) scores and the driving status of patients with AD.
CONCLUSION: We recommend AD patients with an ADL or IADL score above 8 and 14 respectively who continue to drive be referred for a driving evaluation.

Prevalence of cognitive impairment in community-living elders on Medicaid: Implications for geriatric care management.

Fick, D.M., Jackson, T.W., Christos, R., Nixon, G., Payne, E.,Reynolds, J., & Rahn, D. W., Medical College of Georgia, Augusta, GA

Previous studies have suggested there may be widespread underrecognition of cognitive impairment in the minority and lower income population. The Medical College of Georgia (MCG) is one of three active sites funded by the Georgia Department of Medical Assistance to provide community case management to low-income older adults in Georgia. This paper will provide a descriptive evaluation of the elders (63/100) enrolled in MCG Service Options Using Resources in Community Environments (SOURCE), strategies implemented for care for this cognitively impaired population in the community, and the implications for geriatric care management. In the SOURCE program, care management is provided by RN's collaborating with a nurse practitioner, primary care physicians, geriatricians, social workers, and other disciplines. Care managers follow patients across all settings, and assess, plan, coordinate, and monitor care. The typical MCG geriatric SOURCE patient is a 75 year old black female, impaired in one or more ADL's, widowed, living alone, self-rating her health as fair or poor, with a monthly income of $481.00. The mean mini-mental state exam (MMSE) score for the sample of older patients was 19. Over twenty percent of patients had an MMSE score of less than 15. Only 6% (4/63) of patients had a diagnosis of dementia at the time of enrollment.

Correlating driving status with Mini Mental Status Examination (MMSE) in patients with Alzheimer's Disease (AD). A prospective study.

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PURPOSE: To investigate the correlation between Folstein Mini-Mental Status Examination (MMSE) of patients with AD and their driving status.
METHODS: In a prospective study, we evaluated the cognitive and driving status of all patients referred for a dementia evaluation. Patients included in the study met the NINCDS-ADRDA(II) criteria for the diagnosis of probable AD were excluded. Cognitive

function was evaluated by MMSE. Data was analyzed by Pearson correlation test and student's t-test.
RESULTS: Total patients included in the study were 117. Mean MMSE score was 18.6 (with Standard Deviation of 6.2). 43% of patients were driving at the time of evaluation.Mean MMSE of patients who were driving was 22.8 (with standard deviation of 3.24). Mean MMSE of patients who were not driving was 16.88 (with standard deviation of 4.4). There was a high correlation between driving status and MMSE score (p=0.0l). Most AD patients with MMSE ≤ 20 are no longer driving (p-0.001).
CONCLUSION: We recommend driving evaluation for AD patients with MMSE ≤ 20 who still drive.

DEMENTIA SCREENING IN OUTPATIENT ELDERS: PROPOSAL OF A 2 -ITEM QUESTIONNAIRE.

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Objective: To evaluate the effectiveness of a subjective 2-item questionnaire to screen for cognitive impairment/ dementia (CI). Subjects: Frail outpatient veterans ≥ 65 years old, enrolled in an ongoing assessment trial. Methods: All potential subjects returned a postal survey, which screened for geriatric conditions including CI. Enrolled subjects received a structured telephone interview that included several subjective memory questions. In the current study a subgroup of 86 subjects were referred to our geriatric clinic, where their comprehensive assessment included a clinical evaluation for CI with geropsychiatric consultation. Results: The sample (n=86) was 96.5% male, with mean age=74.5 (65- 87). MMSE score mean= 27.4 (19- 30); 12.8% had a score <24. GDS score mean= 5.6 (0- 15). Clinical evaluation found 30% (n=26) had mild- moderate CI. A 2-item questionnaire was created using the subjective memory questions with highest Spearman correlation with clinical diagnosis of CI. Using the geropsychiatric clinical diagnosis of CI as a gold standard, this questionnaire (compared to results of the MMSE as a screening test, shown in parenthesis) had a sensitivity .85 (.42), specificity .54 (1.0), accuracy .64 (.82), negative predictive value .88 (.80), and positive predictive value .47 (1.0). Multiple other combinations of questions were tested, and will be discussed. Conclusion: This 2-item questionnaire appears to be a valid screening instrument for CI within the frail elderly population. If validated elsewhere, it might be used as an initial screen in the busy primary care setting.

SERUM FOLATE, APO E4, AND CHANGE IN COGNITIVE FUNCTION: FINDINGS FROM THE NUN STUDY.

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Several studies have suggested that low serum folate may be related to forgetfulness or overt dementia. In this study we investigated the relationship between serum folate levels, 18 other nutritional markers and the change in Mini-Mental State Exam scores over a 4.5 year period. This was done in a subset of 58 participants in the Nun Study who lived in the same convent, ate food prepared from one kitchen, and received nursing care from the same staff. These participants were divided into two groups: 17 with at least one copy of the apolipoprotein E4 allele (a common genetic marker for Alzheimer's disease) and 41 without the allele. Low serum folate levels at the beginning of the study were correlated with a decline in the Mini-Mental State Exam scores only among participants with at least one copy of the apolipoprotein E4 allele (correlation= 0.52, p=0.05). Folate was not related to cognitive decline among those without the allele. Of the 18 other nutritional markers in the blood, only prealbumin and triglycerides had significant associations with change in cognitive function in those with at least one apolipoprotein E4 allele. This study suggests that elders with one or more apolipoprotein E4 alleles may be particularly vunerable to cognitive decline when serum folate levels are low.

RELIABILITY OF A RESPONSE TO STIMULATION TEST IN PATIENTS WITH TERMINAL ALZHEIMER'S DISEASE

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Most patients in the terminal phase of dementia of the Alzheimer type (DAT) receive the lowest scores possible on standard tests of cognitive and functional capacity and this floor effect precludes quantitative measurement of further progression of DAT or the evaluations of interventions for this population. Our team used 4 items from a tool developed to assess subtle changes in neurological status beyond that of the Glasgow Coma Scale to measure Response to Simulation (RTS-DAT). The RTS-DAT has a range of 4 (most impaired) to 22 (least impaired) and is uncomplicated to administer (paired t-tests of two raters ranged from r = .8 to .9 with low and statistically non significant t-tests). We examined reliability of the RTS-DAT by assessing each quarter the 114 patients enrolled in a 2 year longitudinal study. The RTS-DAT correlated in the expected direction with all other measures and had excellent reliability. Score totals ranged from 18.1 (SD = 5.4) to 12.1 (SD = 6.0); alphas = .78 - .91; all 9 scree plots revealed a single factor solution.

(Supported by Department of Veterans Affairs (IIR #86-010) and Boston University Alzheimer's Disease Center (PHS - P30AG13846))

PREDISPOSING, PRECIPITATING, PERPETUATING, AND PROTECTIVE FACTORS OF DELIRIUM IN HOSPITALIZED OLDER ADULTS.

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Predictors of delirium that could inform the care of older patients were studied in 391 cognitively-intact patients ≥ 65 years of age, with an anticipated length of stay ≥ 48 hours, mean LOS = 7 days. 65.3% were female; 63.6% African-American; mean age was 72.8 years, and incidence of delirium was 14.7%. Using logistic regression, **overall**, delirium (n=59) was predicted by admission cognitive (OR = 1.2281, p = .0041) and functional (OR = 5.6848, p = .0272) status, and education (OR = .8807, p = .0304). However, 3 distinct groups of delirious subjects were identified on the basis of the timing of the onset of delirium. ***Early*** onset delirium (days 1-4; n=44) was predicted by cognitive (OR = 1.1477, p = .0449) and functional (OR = 8.5009, p = .0095) status upon admission. ***Intermediate*** onset delirium (days 5-7; n=12) was predicted by cognitive (OR = 1.5922, p = .0117) and visual (OR = 18.494, p = .041) status. Elderly patients who were functionally impaired and those with limited contact with significant others were at increased risk for intermediate onset of delirium. There were no significant predictors of **late** onset delirium (> 8th day; n=4). Perpetuating factors were environmental factors (OR = .70, p = .074), acute physiology on admission (OR = .56, p = .031), and medications on admission (OR = .72, p = .015). Protective factors were educational background and functional status. These results suggest strategies to prevent and treat delirium overall as well as to prevent and treat early and intermediate delirium.

This study was funded by the NINR, R29 NR002231-05.

SCREENING COMMUNITY DWELLING OLDER ADULTS FOR ALZHEIMER'S DISEASE (AD) BY A MAILED HEALTH SURVEY

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Because multiple treatment options are now available to delay the progression of AD, it is now imperative that we recognize those with AD so that treatment can be initiated early to preserve the existing level of independence retained by the affected individual. We have developed a health survey that screens for AD and AD risk factors using the Clock Completion Test (CCT). Survey respondents were given the Short Blessed Test (SBT) by phone to assess dementia status and a medical evaluation.

Preliminary results indicate that 57% of 197 community dwelling older adults, mean age 78, responded to the survey. Only 27 have been examined at this time by a geriatrician to establish diagnosis of AD.

	N	SBT (±S.D)	Tot Risk Factors (±S.D)
Abn CCT	4	11.3	5.9
Abn SBT		(3.2)	(3.3)
Abn CCT	16	3.6	5.2
N SBT		(2.1)	(2.9)
N CCT	6	10.2	4.8
Abn SBT		(0.4)	(1.7)
N CCT	57	2.7	3.5
N SBT		(2.3)	(3.7)

Preliminary results suggest that the CCT may identify persons with early AD that would not be recognized by the SBT and that the SBT may be more specific than the CCT but less sensitive.

SYMPTOM EXPERIENCE IN EARLY ALZHEIMER'S DISEASE

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Hallmark features of early Alzheimer's disease (AD) include short term memory loss, disorientation, and language disturbance. Most of what is known about these symptoms results from clinical observation or caregiver report. Little is known about the lived experience of such symptoms from the perspective of the person with AD. The purpose of this hermeneutic phenomenological study is to explore how symptoms of early dementia are experienced by community-dwelling elders with early AD - how the person perceives and interprets symptoms, and how they cope with the symptoms on a daily basis. Eight couples took part in the study. Repeated in-depth interviews were conducted both with the person with early AD and with their spouse, and observations were made of the family at home as they went about their usual activities. Results illustrate how symptoms of memory loss (" I can't find where I put things"), disorientation ("I worry about getting lost"), and language disturbance ("I lose the word - my mind goes blank") are perceived and interpreted by those early dementia. Results further demonstrate how people find continuity and meaning in the face of symptoms that disrupt the taken-for-granted flow of everyday life. Such findings inform our growing understanding of the lived experience of early dementia from the perspective of the person with the diagnosis, knowledge that will contribute to the ability of clinicians to provide care meeting the needs of those with early AD.

TACRINE PRESCRIBING IN THE NURSING HOME SETTING: IMPLICATIONS FOR THE FUTURE USE OF CHOLINESTERASE INHIBITORS.

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We conducted a case-control study to describe the use of tacrine in nursing home residents and identify the clinical characteristics predicting its use. We used the SAGE database, a population-based data set, on over 350,000 patients admitted to all the Medicare/Medicaid certified nursing homes in four states (ME, MS, NY, and SD) from 1992 through 1995. The SAGE database combines information from the Minimum Data Set (MDS), from Medicare claims files, and from the On-Line Certification Automated Survey. We sampled all nursing home residents over the age of 65 receiving tacrine (n= 1640) and up to 5 control residents per case matched on state, date of tacrine use, and dementia diagnosis. Only 38% of tacrine recipients had a diagnosis of Alzheimer's disease documented, 25% suffered from severe cognitive impairment, 35% suffered from severe activities of daily living (ADL) impairment, and 17% suffered from both severe cognitive and ADL impairment. Only 8% achieved a therapeutic dose greater than 120 mg/d. In a multivariable model, several patient characteristics that have not been shown to predict tacrine's efficacy were associated with tacrine use and included wandering, physical abusiveness and higher levels of social engagement. In summary, only a few nursing home residents received tacrine, of which a significant proportion were unlikely to benefit from its use. As new therapies become available to treat patients with Alzheimer's Disease, MDS data may assist physicians and facilities to target and monitor therapies for patients who are more likely to benefit from them.

THE IMPACT OF ENVIRONMENTAL FACTORS ON THE DEVELOPMENT OF DELIRIUM

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Approximately 20% of older adults admitted to an acute hospital develop delirium. Delirium is associated with a number of negative consequences including a prolonged hospital stay, higher likelihood of institutionalization and possibly increased mortality. Thus, prevention of delirium is important. The purpose of this study was to investigate a wide array of environmental risk factors while controlling for known host risk factors. The design was prospective, and the study population limited to older patients admitted to a medical or surgical unit of a community hospital in Ontario, Canada. 156 hospitalized patients age 65+ years and without delirium on admission were assessed daily for the first 14 days of their hospital stay or until discharge or death. Delirium developed in 28 of the 156 patients (17.9%). Older age and cognitive impairment were significant host risk factors. Significant environmental risk factors included a high number of medications administered during hospitalization, surgery, a high number of procedures during early hospitalization (e.g., x-rays, blood tests), and intensive care treatment. As number of medications and number of procedures are potentially modifiable risk factors, these findings are important for both clinicians and researchers.

OBSERVATIONAL RESEARCH: "TRIED AND TRUE" VERSUS "CUTTING EDGE" TECHNIQUES

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That "science advances technology" (and vice versa) is an accepted truism. Thus, desiring to uphold scientific rigor, researchers are apt to seek and apply the most advanced technology relevant to their pursuits. Seldom is the "down" side of advancing technology acknowledged, yet alone examined, for its impact on science. The aim of this work was to explicate both gains and compromises arising from the choice of technology for observational research in nursing homes. Three technologies (paper/pencil and stop watch recording, Datamyte, and InfoAide) were compared for their impact on both the content and the methods for studying the wandering behavior of demented nursing home residents. Technologies were considered in regard to the nature of obtainable data and its impact on what can be asked; the quality of obtainable data in terms of reliability and integrity; sources of failure; intrusiveness; and expense. Analyses revealed that the most advanced technology is not always the one best suited to a given study's purpose. Points to consider in selecting a technology include its adaptability for a sufficient range of variables and coding schemes; the cognitive and physical "load" imposed on observers who use it; its impact on the setting; and direct costs, as well as those incurred in readying resulting data for analysis.

EFFECTS OF PRACTICE ON ALZHEIMER'S PATIENT'S COGNITIVE PERFORMANCE

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Trials of treatment for Alzheimer's disease (AD) often assess cognitive efficacy through multiple repeated measures of the patients' cognitive performance. To determine whether practice effects should be considered when evaluating treatment related change in cognitive performance in AD patients, we assessed 38 unmedicated AD patients each week for five weeks. Parallel forms of the Trails A, Digit Symbol, Verbal Fluency, and Digit Span tests were administered according to a Latin-square design. We tested the hypothesis of compound symmetry and equivalent means across all occasions for each test. That hypothesis was rejected for Verbal Fluency [$X^2(17)= 29.92$; $p=0.027$] and Digit Symbol [$X^2(17) =30.15$; $p=0.025$]. Patients' performance improved across occasions for these tests. Practice effects should be considered when interpreting the cognitive efficacy of treatment in AD patients.

STUDY OF COMORBIDITY IN A POPULATION OF ELDERS ADMITTED TO A SPECIAL ALZHEIMER'S UNIT.

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Aim of the study - To assess the prevalence and the distribution characteristics of comorbidity in a group of pts older than 65 yrs admitted to our Unit. **Study population and methods** - 238 pts (104 men, 134 women), mean age 77.9 ± 9.1, consecutively admitted to our Unit entered the study: 52% were affected by Alzheimer's Disease (AD), 15% by Vascular Dementia (VD), and 33% by mixed or other forms of dementia (OD). Comorbidity was assessed by the Charlson's Comorbidity Index (CCI) and the Greenfield's Index of Disease Severity (GIDS). **Results** - CCI resulted significantly higher among men (0.58 ± 0.08 vs 0.46 ± 0.088, $p<0.001$) and among pts with VD vs those with AD and OD: 0.77 ± 0.08 vs 0.60 ± 0.09 and 0.57 ± 0.079, $p<0.001$ and <0.02 respectively). Also the difference between AD and OD pts reached statistical significance ($p<0.05$). **Conclusions** - Although AD pts showed the lowest levels of comorbidity, associated diseases must always be searched for in order to avoid that treatable conditions capable of influencing the course of the disease and the life quality of the pts remain unrecognized and untreated.

Evidence for a non-linear relationship between insight and cognitive status in dementia

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Aim of the study was to evaluate insight in a group of demented patients with two assessment scales and to assess its relationship with the cognitive level. Sixty-nine consecutive patients affected by Alzheimer's disease (n=37) and vascular dementia (n=32) with a wide range of cognitive impairment (MMSE=17.0±6.4) were recruited. Insight was evaluated with the Guidelines for the Rating of Awareness Deficits (GRAD) (Verhey et al., 1993) - specifically targeted to memory deficits - and the Clinical Insight Rating Scale (CIR) (Ott and Fogel, 1992), evaluating a broader spectrum of insight (reason for the visit, cognitive deficits, functional deficits, and perception of the progression of the disease). The shape of the relationship of MMSE with CIR and GRAD scales was assessed with spline smoothers suggesting that the relationship follows a trilinear patter and is similar for both scales. Insight was uniformly high for MMSE score of 24 and higher, showed a linear decrease between MMSE of 23 to 13, and was uniformly low for MMSE of 12 or lower. Our data suggest that the shape of the association between insight and cognitive impairment follows a trilinear pattern with preserved insight in the mildly stages of the dementia, followed by a progressive loss, and finally by a plateau of severe insight impairment in the latest stages of dementia.

PUTTING RESEARCH INTO PRACTICE: A COGNITIVE DEVELOPMENTAL APPROACH TO DEMENTIA CARE

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Participants:

A.D. Linton (U. Texas Health Science Ctr. School of Nursing, San Antonio, TX 78284-7950). Moving from a Research Model to a Practice Model.

S. Ruzicka (U. Texas Health Science Ctr. School of Nursing, San Antonio, TX 78284). Implementing the Model: Working with Administration and Staff.

C. Harris (U. Wyoming, Laramie, WY 82071-3065). Educating , Administration, Staff and Families.

Discussant:

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Although a prevailing philosophy among gerontological nurses is that their practice should be research-based, much of nursing practice is not. Care of dementia patients is often prescribed by individual experiences of caregivers and is frequently based on trial and error. We previously conducted a study to test a theory-based dementia care model - the cognitive developmental approach - in nursing home residents. We found that by using a consistent, theory-based model of care for people with dementia, we were able to decrease problematic behavioral symptoms while decreasing psychotropic medication use. The purpose of this symposium is to demonstrate how we have attempted to adapt this model for practical use in an assisted living dementia facility. This symposium will present an overview of the model and strategies for adapting the research to practical use, problems and pitfalls in implementing the model, involvement of administration and staff in the implementation of the model, strategies for educating staff and administration in carrying out the model, and evaluation of the model. The goal is to provide a consistent, research-based model of care for the use of other care providers and facilities.

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THE HIDDEN COSTS OF MALNUTRITION: PREDICTING HOSPITAL LOSSES AND PATIENT OUTCOMES USING SUBJECTIVE FUNCTIONAL ASSESSMENT FOR NUTRITIONAL SCREENING IN THE ELDERLY

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Poor nutritional status and muscle loss in the elderly contribute to decreased functional status, increased morbidity and mortality. The objective of this study was to determine whether we could predict health outcomes more accurately using a noninvasive tool called Subjective Functional Assessment (SFA) vs. traditional methods (TRAD) of nutritional screening. SFA utilizes prognostic indicators (i.e. changes in functional status, acute weight loss, hand grip strength and physical exam) to assess nutritional status. These parameters were compared to traditional screening methods (albumin, total lymphocyte count, percent ideal body weight and diagnosis).

This study evaluated randomly admitted hospital patients >65years of age (n=100). Patients were screened by both the unit dietitian using the traditional hospital screening method and by the Study Coordinator using the SFA method. All patients were evaluated for number of infections, hospital readmissions/past 6 months, length of stay and hospital charges. Standard Medicare reimbursement per patient DRG was compared to actual hospital charge. Patients were classified in both methods as well-nourished (A), moderately malnourished (B), or severely malnourished (C).

SFA was superior in predicting the relationship of outcome measures such as hand grip strength (f=-16.8, p<.001), hospitalization rate (f=15.0 p<.001), length of stay(LOS) (f=6.12 p=<.003), hospital charges (f=3.77 p=<.02), and unreimbursed hospital charges by Medicare (f=4.94,p=<.009) to degree of malnutrition. The TRAD method did not correlate significantly with any of these outcome measures. Infection rate was better predicted by SFA, but the difference was not statistically significant. Mean unreimbursed hospital charge for severely malnourished patients was $24,037.00 vs. $1,893.00 for well nourished. Mean difference between actual LOS and Geometric LOS/DRG was 4.79 days for severely malnourished and -.39 days for well nourished(f=8.68, p=<.0003).

SFA is better than TRAD for correlating degree of malnutrition with outcomes, nutrition-associated morbidity, total hospital costs, and unreimbursed hospital costs. SFA is a useful way of screening elderly patients for malnutrition since it is highly predictive without utilizing costly laboratory testing.

EFFECT OF DIETARY FIBER IN RESTRICTED, BOLUS ENTERAL FEEDINGS ON SERUM INSULIN IN RATS

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Delivering bolus enteral feedings during limited time periods is often preferred by patients, in part because of less activity restriction. With aging, insulin release may be altered, e.g., in speed of response or ability to mount a precise incremental response to changing blood glucose levels. Hourly insulin values were used in this experimental study to examine serum fluctuations in four study groups on bolus 12-hr enteral feedings with high or low fiber content and two kilocalorie levels.

Male, adult healthy rats were maintained on a 21-day protocol. Enteral feedings were given Days 11-21, after environmental and feeding acclimation. Animals contributed blood samples on Days 19-21 for serum insulin ^{125}I assays. In each of the four groups, serum insulin levels were significantly higher (p<.01) the hour after feedings. The two highest levels, 105 and 108 μg/ml, were in the low fiber groups. These values occurred the hour following bolus feeding closest to midsleep (11am). In the group on 80kcals/day, the preceding and following hour values (10am and 12noon) were 8 and 32μg/ml; in the group on 55kcals/day, corresponding values were 13 and 28 μg/ml. This contrasts with the high fiber, 12-hr bolus fed groups. There, peak levels occurred 4 hours later (3pm), and reached only 67 and 28 μg/ml, up from the 2pm levels of 35 and 12 μg/ml in the 80kcal and 55kcal groups, respectively. By far, the biggest hourly differences were in the low fiber groups. For elders with limited ability to reach rapid, major insulin levels, restricted (rest time), low fiber bolus feedings may confer an increased burden.

ORAL HEALTH PREDICTORS OF SIGNIFICANT WEIGHT LOSS AMONG COMMUNITY-DWELLING OLDER ADULTS

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Poor nutrient intake and poor nutritional status commonly afflict older adults. One potentially reversible contributor to undernutrition in older adults is poor oral health. We used data from the New England Elders Dental Study (NEEDS) to further delineate the impact of oral problems on significant weight loss (SWL is defined as a loss of 4% of more of one's total body weight over a one year). We studied 563 community dwelling older adults, ≥70 years, for whom weight information was available at baseline and one year later. During the baseline assessment, trained dentists performed in-home oral examinations. In addition, standing weight, health status, functional status (Katz ADL), comorbidity, lifestyle behaviors, and general demographic information were obtained. Oral health measures included number of teeth, tooth recession, oral pain, perceived chewing difficulty. One year later, telephone interviewers collected information on nutritional status and current weight. Using logistic regression analyses, controlling for age, gender, income, educational status, memory impairment, living arrangement, marital status, smoking status, alcohol intake, functional status and comorbidity, significant predictors of SWL among the entire cohort were age > 80 years, weight at baseline, and edentulousness (irregardless of denture use). Among dentate subjects, predictors of significant weight loss were age > 80 years, weight at baseline and decreasing number of teeth. In conclusion, tooth loss and edentulousness predict weight loss among older adults.

ETHNIC AND GENDER VARIATION IN THE DIETARY INTAKE OF RURAL ELDERS

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Considerable evidence suggests that the physical and social changes that accompany aging place older adults at nutritional risk. Those in rural communites may be at additional risk due to lower incomes and education level, as well as structural barries to obtaining an adequate diet. This study examines dietary intake of rural elders and compares intakes by demographic characteristics. Data were collected as part of an ethnographic study of the nutritional self-management of community-dwelling elders aged 70+ in two ethnically diverse rural North Carolina counties. The sample included 145 elders (48 African American [AA], 54 European American [EA], and 43 Native American [NA]) and was 61% female and 39% male. Dietary intake was measured with a semi-quantitative food frequency questionnaire from the NCI-Health Habits & History Questionnaire. Nutrient analysis (excluding nutrients from supplements) showed mean intakes comparable with national data. EA males had intakes significantly higher than AA males for energy, total and saturated fat, protein, and iron; there were no between-group differences for females. These findings have implications for identifying population segments at nutritional risk. Supported by NIA grant AG13469.

DETERMINANTS OF DEHYDRATION AND ITS EFFECT ON OUTCOMES IN YOUNG AND OLD HOSPITALIZED PATIENTS

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We reviewed 800 consecutive admissions to a university teaching hospital. Older patients (≥ 65 years) were more likely to be dehydrated (Bun/Cr ≥ 20) when compared to younger patients (29% vs. 18%, $p<0.001$). Dehydration was more frequent in older Caucasians when compared to older African Americans (32% vs. 20%, $p< 0.01$). Younger patients showed similar trend with regard to race although the difference was insignificant. Younger males were more likely to be dehydrated when compared to younger females (23.7% vs. 11.7 %, $p< 0.005$). Older females, on the other hand, where more likely to be dehydrated when compared to older males (23.8 % vs. 33.6%, $P<0.05$).

In younger patients, dehydration was significantly associated with the diagnosis of CHF, number of admission medications (NAM), but not with number of medical conditions (NMC). In older patients, on the other hand, dehydration was significantly associated with NMC, CHF, but not with NAM.

Length of hospital stay was significantly longer in older dehydrated patients but not in younger dehydrated patients, while in-hospital mortality was significantly higher in younger dehydrated patients but not in older dehydrated patients. We conclude that age, race, sex, CHF, NAM, and NMC are all determinants of the occurrence of dehydration, which is associated with poor outcomes in hospitalized patients.

DETERMINANTS OF PROTEIN-ENERGY MALNUTRTION AND EFFECT ON OUTCOMES IN YOUNG AND OLD HOSPITALIZED PATIENTS

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We reviewed 800 consecutive admissions to a university teaching hospital. Older patients (≥ 65 years) were more likely to have protein-energy malnutrition (PEM), albumin <3.5 g/dl , than younger patients (42% vs. 26%, $p<0.001$). In older patients, PEM was significantly related to sex (48% female vs. 35% male, $p<0.05$) but not to race. PEM was related to neither sex nor race in younger patients.

PEM was not associated with the diagnosis of dementia, depression, CHF, cancer, diabetes, COPD, and stroke in either age group. PEM, however, was significantly associated with renal insufficiency in older (P<0.01) but not younger patients (p=0.16). PEM was significantly associated with number of medical diagnosis in both younger (p<0.005) and older patients (p<0.001) but not with the number of medications on admission in either age group.

Length of hospital stay (LOS) was greater in older patients with PEM compare to those without PEM (9.6 ± 8 vs. 7.5 ± 6, p<0.05). LOS in younger patients showed similar trend with the difference being insignificant. In-hospital mortality was greater in younger patients with PEM when compared to those without PEM (6.7% vs. 2.3%, p<0.05). In older patients, PEM was not related to in-hospital mortality.

We conclude that age, sex, and number of medical conditions but not race and number of medications on admission are predictive of PEM which is in turn associated with poor outcomes in hospitalized patients.

RELIABILITY OF THE 'MINI-NUTRITIONAL ASSESSMENT' (MNA) IN NURSING HOME (NH) PATIENTS.

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Protein-calorie undernutrition is common among elderly people in geriatric institutions, and the MNA is a tool to evaluate risk of undernutrition in older persons. We administered the MNA twice to the 87 pts admitted to a NH in 1996 in order to meaure its reliability in our setting. Both evaluations were carried out in 10 to 30 days (mean= 14.6 d) by two nurses. Reliability was estimated in two ways: 1) internal consistency, estimated with Cronbach's Alpha (ac) and 2) test-retest reproducibility, estimated with intra-class correlation coefficient (ICC) and Kappa index (K). Mean age of the 13 men was 79 yrs (SD=9) and of the 54 women was 84 yrs (SD=8). Mean MNA score and 95%CI was 20.8 (19.5-22.2) at 1st administration and 21.3 (20.2-22.4) at the second. Internal consistency estimation for 1st and 2nd administrations were ac= 0.83 and 0.74. ICC was = 0.89 (mixed effects model). Considering the MNA categories (1=malnourished, 2= at risk, 3= well-nourished), a K index of 0.78 was obtained between the 2 administrations. Among the 18 Kappa indices corresponding to each MNA item, a K considered 'almost perfect' (0.8-1) was obtained in 6, a 'substantial' K (0.61=0.8) in 6, a 'moderate' K (0.41-0.6) in 3, and 'average' K (0.21-0.4) in 2, and the K was 'small' in 1 of them (0.0-0.2). The 3 items with lowest K were: self-perception of health, fluid consumption and brachial circumference. Results show good reliability of the MNA in our institution, both for internal consistency and test-retest reproducibility. However, items with lowest reliability may need special training (e.g. judging fluid intake or measuring arm circumference).

A GERIATRIC SWALLOWING CENTER IN A LONG TERM CARE SETTING A STUDY OF ACCESS AND OUTCOMES

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The Geriatric Swallowing Center was established by Speech Pathology at our long term care facility one and one half years ago to evaluate and treat dysphagia in our long term inpatients, short term subacute inpatients, and an outpatient rehabilitation population. Patients undergo clinical swallowing evaluation, video fluoroscopic and fiberoptic endoscopic studies, EMG, and modified barium swallow studies. Following the results of these tests appropriate swallowing intervention modalities are effected. Fifty one patients with a mean age of 79.6 years and etiologies which include CVA, degenerative neurological diseases, peripheral neuropathy, and vocal cord paralysis have been evaluated to date. On a scale of 1-5 with 5 being the highest rating ; mean scores for patient satisfaction scale, physician satisfaction scale and patient rating of swallowing problem scale are 4.6, 4.3 and 4.5 respectively. On the saliva management and dysphagia management scales there was substantial improvement from pre to post test.

VALIDITY OF REPORTED ENERGY INTAKE IN PERIPHERAL ARTERIAL OCCLUSIVE DISEASE PATIENTS

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The purpose of this study was to assess the validity of the self-reported energy intake of peripheral arterial occlusive disease (PAOD) patients. Thirty-four male PAOD patients (mean age of 68.8 ± 6.6 years SD) were recruited. Self reported energy intake was calculated from 4-day food records. Total daily energy expenditure (TDEE) was measured by doubly labeled water. Patients were evaluated for weight, height, body mass index (BMI), percent body fat (%BF) by dual energy X-ray absorptiometry, waist to hip ratio, daily physical activity by Caltrac and resting ankle/brachial systolic blood pressure index (ABI). The mean (± SD) energy intake was 1971.9 ± 437.4 kcal/d and mean TDEE was 2485.5 ± 468.3 kcal/d. Mean difference between intake and expenditure was 513.6 ± 617.1 calories (P<.0001). There were significant correlations with the discrepancy between caloric intake and expenditure and weight (r=.36, p=.04), waist circumference (r=.44, p=.01), hip circumference (r=.31, p=.08), waist to hip ratio (r=.33, p=.06), and daily physical activity (r=.37, p=.03). BMI, %BF, and ABI were not significantly related to the caloric discrepancy. We conclude that dietary intake is underreported in PAOD patients, and higher amounts of underreporting are related to greater body size and higher levels of physical activity.

Supported by NIA (P60AG12583 and K01AG00657).

PREDICTORS OF NUTRITIONAL RISK AMONG RURAL ELDERS

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Many older adults are at nutritional risk, due to conditions that interfere with their achieving optimal nutritional status and that are predictive of future functional decline. The 16-item Nutritional Risk Index (NRI) (Wolinsky et al., 1985) is designed to measure such risk. This study examines the nutritional risk status of older adults living in rural communities. Data come from face-to-face interviews with a random sample of 638 persons aged 55+ in rural Kentucky. Analyses compared both total nutritional risk and specific types of risk by gender. Women scored significantly higher on the NRI, indicating greater nutritional risk. They were more likely to report risk items related to oral health, special diets, gastrointestinal problems, and anemia. Men were more likely to report smoking regularly. Nutritional risk was not related to age, but did correlate with functional status for both males and females. These results indicate that older women are at disproportionately high risk in this rural population. Because they are also more likely to be widowed, live alone, and have lower incomes, they may be especially vulnerable to nutrition-related morbidity and mortality. Rural health care providers need to be aware of the possible consequences of these nutritional risk factors for their patients, particularly in rural environments where access to tranportation and services present additional barriers to achieving optimal nutritional status. Supported by NIH grants AG07999 and 5T32AG00182.

SWALLOW EVALUATION IN ELDERLY PATIENTS SHOWS THREE "REAL-LIFE" VISCOSITY LEVELS IN FOUR MEDICAL DIAGNOSTIC GROUPS.

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Dysphagia (dysfunction of the oral, pharyngeal and/or esophageal stages of swallowing), which occurs in up to 40% of the elderly, can be diagnosed using radiologic and endoscopic testing: silent aspiration can also be identified. However, standardization of evaluation methods and materials is critically needed for full utilization of these new techniques. The purpose of this investigation was: 1) to characterize elderly patients (n = 149, age ≥ 60 yrs.) referred to our Speech Pathology Service by swallow ability and medical diagnostic group and 2) to report the results of instrumental evaluations utilizing standardized testing. Results of this 12-month retrospective review are shown in Table 1 and indicate complex patterns of viscosity tolerance across the four diagnostic categories. These results show the lack of predictable uniformity of swallow ability and illustrate the need for instrumental evaluation of all elderly patients with dysphagia.

Dx Group	No liquids	Thin (8-11 cP)	Thick (30-50cP)	Ultrathick (250 cP)
CVA (n=72)	8% (n= 6)	62% (n= 45)	6% (n= 4)	24% (n=17)
Lung DZ (n= 27)	15% (n= 4)	62% (n= 17)	4% (n=1)	19% (n= 5)
GI DZ (n= 14)	7% (n= 1)	71% (n= 10)	0	22% (n= 3)
Other DZ (n= 36)	17% (n= 6)	63% (n= 23)	3% (n= 1)	17% (n= 6)

COMPENSATORY FEEDING STRATEGIES FOR OLDER PATIENTS WITH DYSPHAGIA: DIAGNOSIS MAKES A DIFFERENCE.

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The immediate and long-term negative effects of swallowing disorders on food intake are well recognized. However, patterns of progression may differ according to the etiology of the disorder and the presence/absence of appropriate dietary management. We evaluated nutritional indicators (body mass index [BMI] and serum albumin [SA]) in 74 older (mean age = 70.6 ± 10.8 yrs) patients with dysphagia before and after a diet/feeding group intervention. Subjects were stratified into 2 groups by etiology of their condition: 34 had dysphagia as a post-cerebrovascular accident [CVA] outcome, while the remainder had other causes [OC], e.g., head/neck cancer. Mean SA (in g/dl) was similar before (CVA = 3.6 and OC = 3.7) and after (CVA = 3.5 and OC = 3.6) diet intervention. However, the OC group had a lower initial BMI (21 vs. 25 in CVA) and differed ($p<0.01$) in response to the intervention. BMI declined by 2 points in OC, while it increased by 2 points in CVA. Thus with appropriate intervention, older patients with dysphagia due to CVA may maintain or improve their nutritional status, while patients with deteriorating conditions may not benefit from the same approach. Based on these results, a program of compensatory feeding strategies including dietary modifications based on radiographic and endoscopic evaluations has important value for rehabilitation of older CVA patients with dysphagia.

COMPARISON OF FOUR STANDARDS USED TO DETERMINE RECOMMENDED WATER INTAKE AMONG NURSING HOME RESIDENTS

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The purposes of this study were to: 1) compare the recommended water intake of 4 established standards, and 2) compare the actual water (from food and fluid) intake of NH residents with the 4 standards. The data of 4 studies determining the water intake of NH residents were merged. Water intake was based on 24-hour observation by trained nurse observers of food and fluid ingested. The sample was comprised of 157 residents (63 males; 94 females) of 3 rural and 3 urban NHs. Mean age of the subjects was 84.7 yrs (SD = 6.68). The 4 standards compared were: #1- 30 mL fluid per Kg actual body weight (ABW); #2 – 1 mL fluid per Kcal energy consumed; #3 – 100 mL fluid per Kg for first 10 Kg ABW, 50 mL fluid per Kg for next 10 Kg ABW, and 15 mL fluid per Kg for remaining Kg ABW; and #4 – 75% of 1,600 mL/m^2 BSA. The recommended water intakes based on each standard were significantly different (paired t-test). The mean water recommendation for Standard #2 was the lowest (x=1687,SD=487), followed by standard #1 (x=1843, SD=342). The mean recommendation based on standard #3 (x=2122,SD=171) was only 214 mL more than standard #4 (x=1908,SD=285). Mean actual water intake was 1977 mL (SD=526.5). The mean percent of actual water intake compared to each of the standards was as follows: standard #1-106.04% (SD-35.26); standard #2 - 117.53% (SD-34.92); standard #3 – 88.08% (SD-24.76); and standard #4 – 100.31% (SD-26.54). The recommended water intake based on the 4 standards varied considerably for most subjects. Standard

#4 is recommended for future research and clinical practice as stature is considered in the formula, providing the most individualized recommendation.

SWALLOWING EVALUATIONS AND AVERSIVE FEEDING BEHAVIOR IN DEMENTIA PATIENTS.

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The Aversive Feeding Behavior Inventory (AFBI)[1] permits lay and professional feeders to easily recognize five groups of behaviors that hinder or prevent effective oral nutrition in late stage dementia. "Dyspraxia/agnosia" and "resistive behaviors" interfere with food reaching the mouth. "Selective behaviors" (altered quality of what is eaten), "oral dysphagia" and "pharyngeal dysphagia" interfere with the mechanics of eating. Each group suggests a different approach to enhancing oral feeding. This study was undertaken to examine the concordance of bedside observations of the mechanics of eating with formal swallowing evaluations. Of 141 demented nursing home residents assessed with the AFBI, 70 had swallowing evaluations for weight loss, dysphagia, or participation in other studies. Of these, 22 had selective or oral dysphagia and 2 had pharyngeal dysphagia according to the AFBI; 38 had oral dysphagia, 26 categorized as mild, and 13 had pharyngeal dysphagia, 7 mild, by swallowing evaluations. All AFBI identified eating difficulties were confirmed by swallowing evaluations. Swallowing evaluations identified additional swallowing difficulties that were mostly characterized as "mild". Mild was defined as "managed by dietary restrictions or medications, adaptive feeding strategies, and without secondary respiratory complications".

The AFBI will be presented with videotapes of characteristic behaviors. Studies using the AFBI indicate that AFBs change over time from dyspraxia/agnosia and resistive to selective, oral and pharyngeal dysphagia. Persistent failure of the volitional, oral preparatory phase of eating may predict imminent death.

[1] Blandford G et al. "Assessing abnormal feeding behavior in dementia" Research and Practice in Alzheimer's Disease (Supplement), Springer, NY, 1998, in press.

NUTRITIONAL RISK AND NUTRITION-RELATED BEHAVIORS IN EXERCISING AND NON-EXERCISING RURAL ELDERS

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Studies on health promotion in young adults show clustering of lifestyle behaviors, but this may not be true for older adults due to physical changes associated with aging. The purpose of this paper is to compare nutritional risk and nutrition-related behaviors in exercising (n=112) and non-exercising rural elders (n=70), and their association with indicators of physical and mental health. Nutritional risk was measured using the Nutrition Screening Initiative Checklist, and nutrition-related behaviors were based on a 9-item subscale (alpha=0.76) of the Health Promoting Lifestyle Profile. Differences between exercisers and non-exercisers were significant for nutrition-related behavior, but not nutritional risk. A high percentage in both groups had moderate to high nutritional risk, and failed to achieve dietary recommendations. Acceptance of responsibility for one's health emerged as the strongest predictor of nutritional status in the regression model. Although exercisers had more positive dietary behaviors than non-exercisers, when controlling for the combined impact of independent variables in the multivariate analysis, no between-group difference in nutritional status was found. Results did not indicate clustering of lifestyle behaviors in the elderly. Supported by McNair Program, Truman State University.

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MEDICATION USE BY THE OLD-OLD: COMPARISON OF A VETERANS HEALTH CARE SYSTEM AND A UNIVERSITY-BASED GERIATRIC CENTER

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Despite estimates that the old-old population will double by the year 2020, little is known about medication sue in those $\geq$85 years of age. The purpose of this study was to describe medication use by ambulatory patients $\geq$85 years of age and to determine if there were any differences in prescribing patterns between two distinct sites. Patients at the VA Pittsburgh health Care System were primarily men who were treated by general internists. Patients at Benedum Geriatric Center (BGC) were primarily women who were treated by a multidisciplinary geriatric team. This study was a retrospective review of prescription and nonprescription medications. Individuals aged 85 years and older were identified from computerized medication records. The mean number of medications taken and the number of different therapeutic classes of medications taken by patient were the main outcome measures. The number of duplicate medications was a secondary outcome measure. Three hundred forty-two patient records were analyzed; 145 from the BGC and 197 from the VA clinic. The mean age of the patients in each group was 89 years. The mean number of medications per patient was 5.5 in the BGC group and 4.6 in the VA group ($p=0.01$; student t-test). Duplicate treatments were not common in either group, 2% of patients in the BGC group and 3% in the VA group. Patients at the BGC were more likely to be treated with psychoactive medications, thyroid medications, and vitamins while patients in the VA group were more likely to be prescribed urinary, ophthalmic, and gastrointestinal medications ($p<0.005$, Chi-square). In addition to gender specific factors and differences in data capture, the increased attention to cognitive, psychiatric, and nutritional disorders by a multidisciplinary geriatric care team is postulated to account for the disparity.

EVALUATION CONFIDENCE AND LEARNING GOALS FOR GERIATRIC CONDITIONS AMOUNG MARYLAND FAMILY PHYSICIANS.

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Primary care physicians provide the majority of initial evaluations for older patients. However, little is known about their confidence in evaluating geriatric conditions or about their plans to improve their geriatric knowledge base. We surveyed 216 family physicians in Maryland about their confidence in evaluating four geriatric and four general medicine conditions in adults >65 years old. We assessed their likelihood to pursue education in these areas (CME, journals, texts, etc.) over the next six months. The physicians' age ranged from 26-80 years, and they had graduated an average of 22 years previously. 59% reported currently treating nursing home or homebound patients for an average of 2.4 hours per week. 24 (11%) had a CAQ in Geriatrics. The evaluation conditions included General: (myocardial infarction, embolic stroke, diabetes mellitus, atrial fibrillation) and Geriatric: (dementia, urinary incontinence, hearing loss and depression).

	MI	CVA	DM	AF	Dem	UI	Hear	Depr
% Confident in Evaluation	48.6	38.4	53.2	54.2	36.6	37.3	30.2	29.2
% Likely to obtain CME	23.1	20.8	29.6	16.7	27.8	18.5	9.7	23.1

Overall, Family physicians were more confident evaluating general medical conditions compared to geriatric conditions ($p < 0.05$), yet were not more likely to pursue education in geriatric conditions than general medical conditions. These findings persisted after adjustment for low percentage of patients >65. Conclusions: Family physicians are less confident in evaluating geriatric conditions, and few have plans to correct this. These findings suggest that primary care physicians may benefit from focused educational interventions to improve their ability to care for older adults.

THE RELATIONSHIP OF MEDICAL STUDENT ATTITUDES TOWARDS THE ELDERLY AND THEIR INTEREST IN GERIATRICS

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UMSM requires all third year students to complete two weeks of Geriatrics. We were interested in variables that affect the medical students' interest in working with the elderly in the future and the potential contribution of closeness to one's grandparents and other experiences with the elderly. Student's attitudes about elderly patients were assessed before and after the course using a paired t-test (N=52). Positive change was found in attitudes toward preventive medical care and as being gratifying to treat ($t = 3.44, p < .01; t = 3.293, p < .002$), but most still choose to treat younger patients. The primary variable that predicted future interest in working with elderly patients was the medical student's reported feeling of closeness to their grandparents. These findings suggest that medical students seek further training in areas where they have positive personal experience. Although the students' interest in seeking formal training in Geriatric Medicine was relatively small, it appears that a short course in Geriatrics can achieve the goal of having more students develop a positive view of managing the care of the elderly as part of their future professional practice.

MEDICAL PUBLISHING AND GERIATRICS CME: EVALUATION OF A JOURNAL BASED EXPERIENCE

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Strategies for continuing medical education(CME) opportunities in Geriatrics will evolve to take advantage of a variety of teaching techniques. While face-to-face encounters such as lectures, conferences, and rounds continue to be extensively used, text-based techniques have widespread acceptance.

We will present a collaboration model between our Institute on Aging, our school of medicine and the publishers of a monthly journal devoted to clinical geriatrics. One aim of the collaboration is to offer CME credits for the successful completion of a questionnaire which accompanies a designated article in that issue. CME candidates study the article, complete the questionnaire with a "comment" section, and mail their responses to the medical school for grading. Credit certificates are returned to the candidates. Frequently missed questions can result in follow up articles which offer further clinical information.

The program has attracted a steady base of candidates with a variable number of occasional users. The regular users (10 of 12 issues) tend to practice in rural areas. However, the responses reveal several areas where knowledge deficits exist. Comments accompany approximately 25% of the responses; 90% of the comments reflect benefit of the program to practice. We are in the process of expanding the program to a web-based format, which would offer the possibility of interactive learning between the candidates and our faculty. To be presented are the outcomes of this CME program and its potential for replication, especially for practitioners located in isolated areas.

CHOOSING A GERIATRIC TRAINING EXPERIENCE: AN ANALYSIS FROM A SUMMER INSTITUTE

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To expand awareness of geriatric medicine among medical students, a Summer Institute, funded by the John A. Hartford Foundation, was held. A pre-attendance survey was used to examine the differences between those who chose to attend (n=13) and those who did not choose (n=13). Knowledge of and attitudes toward aging, and beliefs/values about training and care were examined. Those who attended were older (29 vs. 25 yrs). Both groups expressed a preference for primary care careers, although 38% of attendees vs. 0% of non-attendees preferred geriatric medicine. General interest in geriatric medicine was significantly different, (p=.014). No differences in descriptors of aging or knowledge of geriatric issues existed; both groups were as likely to mention functional and cognitive reasons for nursing home care. However, 84% of attendees felt the most compelling reason to care for older adults was to provide needed service while only 38% of the non-attendees felt so. Attendees expressed favorable interest in this care with additional training; non-attendees identified more pejorative barriers to care (p=.000). Geriatric educators should be sensitive to differences in beliefs and values toward care of older adults. Further exploration of the role values play in preclinical development and choice of clinical experiences among medical students should be encouraged.

Internet Models for Geriatric Education: A Tool for Teaching Comprehensive Geriatric Assessment.

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An Internet based geriatrics curriculum for a third year rotation has been developed. One module discusses comprehensive geriatric assessment (CGA). CGA improves care of the aged, but can be time consuming and impractical in some clinical settings. This project evaluates Internet based learning and a memory device (the mnemonic "AGING GAMES"*) developed as a tool for teaching CGA.

Students on the main campus or at off-site locations can access the Geriatrics web site. Via computer simulation, the "AGING GAMES" module provides didactic material about the components of CGA and allows "performance" of a comprehensive assessment. Students are evaluated via pre-post test knowledge and attitude assessments, and are asked to provide module evaluation. Evaluations and test scores of 45 students have been favorable. Future work will include prospective validation of AGING GAMES as an educational and clinical tool for CGA.

*Audiovisual
Gait
Insomnia
Nutrition
GI
GU
ADLs/Advance Directives
Mood/Memory
Everyday activities
Sexual activity

TEACHING PSYCHIATRIC RESIDENTS HOW TO WORK COLLABORATIVELY

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Recent reforms in mental health and long-term care have lead to changes in the role of psychiatrists. Increasingly, there is a need for psychiatrists to assume the roles of medical expert, consultant, collaborator in care, advocate, educator, and program developer, which are essential core components in geriatric psychiatry. However, curriculums often fail to formally prepare psychiatric residents for these new roles. Consequently, a pilot project was developed which addressed issues related to providing collaborative care. Collaborative care was defined across three dimensions: the client, the team, and the organization. A series of interactive, problem-based educational sessions were utilized to provide education in these three areas. This series was pilot tested with a group of psychiatric residents at McMaster University. The evaluation results indicated that 80% of the residents rated the sessions as being "as important" or "more important" than their other core program offerings and 100% rated the series as being relevant to their training, field placements, and future careers. Further, 100% of the residents indicated that the series should continue to be offered. This paper will discuss the development of the collaborative care series, the results of the evaluation, and the implications of the changing role of psychiatrists in geriatric settings.

Teaching medical and nursing students about interdisciplinary community care management for older adults.

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The Medical College of Georgia (MCG) is one of three active sites funded by the Department of Medical Assistance to provide community case management to low-income older adults in Georgia. At MCG we have integrated medical and nursing students into this program, to teach students about interdisciplinary collaboration for this complex elderly population. This paper will describe the evaluation and phase II of this educational initiative. A typical MCG geriatric SOURCE patient is a 75 year old black female, impaired in one of more ADL's, widowed, living alone, self-rating her health as fair or poor, and living on a monthly income of $481.00. Care management is provided by RN's collaborating with the nurse practitioner, primary care physicians, geriatricians, and other disciplines. Medical students spend 3 half days per quarter with the nurse care manager, while nursing students spend 2 days per quarter. Students visit elders in their own environment and participate in the evaluation and care plan development for these patients. Medical students spend an additional half day with the local home health agency. All students attend the SOURCE weekly interdisciplinary team meeting involving physicians, nurses, social workers, and occupational therapists.

AN INNOVATIVE MODEL OF GERIATRIC INTERDISCIPLINARY EDUCATION.

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Mount Sinai has developed an interdisciplinary "Geri- Ortho" fracture service model that has treated 400 patients. Since, July 1996 all orthopedic patients who have hip fractures and are 65 or older are required to have a geriatric assessment.

Weekly team meetings now average 25 people including orthopedic surgeons and residents, geriatricians and fellows, internists, anesthesiologist, geropsychiatrist, neurologist, medical students, nurse practitioner/coordinator, physiatrist, O.T., P.T., dietician, social worker, nurses, physician's assistant and all of their respective students. These rounds include case presentations, X-ray readings and

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complete team discussion including surgical considerations, medical issues, geriatric concerns, nutrition, social concerns, goals for and progress in rehabilitation. Formal daily rounds are held within the geriatric team.

The success of this interdisciplinary educational program has been improved patient care. Significant improvements in the choice and doseage of medication particularly analgesics and anticoagulation has decreased hospital mortality from 5.1% in 1990-4 to 3.5% in 1997. Length of stay has decreased from 10.45 days in 1996 to 8.19 days in 1997.

THE MEASEY SCHOLARSHIP IN INTERNATIONAL GERIATRICS - A MODEL APPROACH TOWARD RAISING AND PROMOTING INTEREST IN GERIATRIC MEDICINE

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Despite a rapidly aging population, a tremendous shortage now exists of physicians with interest and expertise in geriatrics. Studies have shown that beginning medical students have already formed some unfavorable attitudes about older persons. Thus, creative interventions must be formulated to reverse this trend and ameliorate the need. With funding from the Benjamin and Mary Siddons Measey Foundation, the Institute on Aging of the University of Pennsylvania established a competitive scholarship to 1) recognize and foster excellence among medical students with an interest in geriatrics early on in their training; 2) provide future geriatricians with the opportunity to broaden their clinical perspective and benefit from a world renowned geriatric program; and 3) continue to improve the quality of medical school training through collaborative work with academic medical schools internationally. This Scholarship gave five Scholars the opportunity to participate in a geriatrics rotation at the University of Edinburgh, Scotland for four weeks. In year one, nearly fifty students inquired about the Scholarship resulting in 14 applications. After completing the rotation, the Scholars filled out an extensive evaluation form to assess the quality and value of this program as well as its impact on their careers as future practitioners. They not only felt that their experiences enhanced their perspective and understanding of geriatric care, but also heightened their interest to pursue further geriatric-related activities throughout their medical school careers. In fact, one Scholar, a fourth year medical student, has conclusively decided to become a geriatrician. Though this program is only in its second year, its ability to impact students is impressive, and thus would be a good model for other academic institutions to utilize.

GERIATRIC CLINICAL SERVICE GROUPS: THINKING OUTSIDE THE TRADITIONAL AGING "BOX"

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Participants:

R. Lavizzo-Mourey (Institute on Aging, Philadelphia, PA) Integrating Clinical and Business Strategies under a Geriatric Clinical Service Group Model.

D. Shulkin (Chief Medical Officer, University of Pennsylvania Health System, Philadelphia, PA 19104) Clinical and Economic Returns from Branding of Disease Management Guidelines.

N. Smith (Institute on Aging, Philadelphia, PA) Blending Academic and Political Strategies in Implementing Geriatric Clinical Service Groups.

I. W. Ferniany (Marketing, University of Pennsylvania Health System, Philadelphia, PA) Strategies for Linking Marketing and Service Goals for Comprehensive Geriatric Care:

G. Kerr (Human Resources, University of Pennsylvania Health System, Philadelphia, PA) Mobilizing Human Resources under Geriatric Clinical Service Groups

T. Gilmore, F. Gogarnoiu (Center for Applied Research, Philadelphia, PA) Take-away Messages and Lessons for Health Care Institutions

Clinical Service Groups (CSGs) have emerged as a key competitive strategy for health systems for marketing services and integrating service and financial goals across departments and units. The introduction of CSGs in academic medical institutions presents unique tensions and opportunities in the blending of a traditionally "pure" academic research and education mission led by clinicians and scientists with business concepts, goals and executives. The University of Pennsylvania Health System took on Geriatrics, one of the most complex Clinical Service Groups, as an early priority for CSG "roll out." This symposium of UPHS clinicians and executives will present key elements that led to the successful adoption of a Geriatric CSG in this academic medical center and lessons for other academic and non-profit health systems.

The ABC's of Medicare-A User Friendly Approach.

VML Roche, University of Colorado Health Sciences Center, 4200 E. 9th Ave. Campus Box B-179, Denver, CO 80262.

Participants:

Leela R Bolla, Center on Aging, University Hospital, UCHSC, Denver, CO. History, Legislation and Overall View of Medicare.

VML Roche, School of Medicine, University of Colorado Health Sciences Center, Denver, CO. Practical Applications of Medicare.

Don Backstrom, Briarwood Health Care Center, 1440 Vine St, Denver, CO 80206. Interdisciplinary Team Medicare Coverage in Ambulatory Care, Inpatient Care, Home Care and Skilled Nursing Facilities.

Discussant:

Diana Hersh, Center on Aging, University of Colorado Health Sciences Center, Denver, CO.

This is a primer on Medicare pertinent to all health professionals caring for older adults. We will describe fundamental Medicare concepts and provide an overall view of Medicare. This interactive symposium will explain terms such as benefits, deductibles, copayments, Part A, Part B, the 3 day rule, enrollment policies, durable medical equipment, gaps in coverage and skilled needs. Clinical cases will be used to illustrate major teaching points and we have allotted time for interactive discussion. This educational symposium will enable you to be better advocates for your patients within the current reimbursement system.

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Recognizing Masked Depressive Symptoms in the Demented Elderly with Behavior Problems and Treating Them Successfully with ECT

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Johnston R. Bowman Health Center for the Elderly
Rush Presbyterian St. Luke's Medical Center
Chicago, Illinois

Twenty-eight patients on a gero-psychiatric unit in a large urban teaching hospital were treated with Electro-convulsive Therapies (ECT). These patients presented with symptoms of depression that are part of the DSM IV diagnosis that were easily missed because of the dramatic symptoms of dementia. These patients were unable to utilize verbal expression for the most part to report their feelings. They were fighting, screaming, swearing, looking very angry or terrified, and the diagnostic assessment of the depression was more difficult. All the patients responded to the ECT which tended to support the diagnosis of depression.

The average age of the sample was 79 with a range from 64 to 98. Their behaviors were very severe, and had caused them to be removed from their care giving environments. They were so disruptive that they could not be managed by caring relatives or nursing homes. Their length of stay is more than double the average for this unit at 41.7 days. Some is this was attributed to the family's reluctance to use ECT, and part was do to the extremely difficult behaviors that needed to be controlled before the patient could be returned to their environments.

Instead of increased confusion being a problem, most of the sample improved in their cognitive functioning after treatments. Some patients did not have long lasting effects and had to return for either outpatient treatments or 23 hour admissions. ECT proved to be a very effective treatment with this very difficult population, and may be a treatment of choice in the demented elderly with behavior problems.

SMILES: Multicentric Italian Study on Extreme Longevity. Cognitive State Evaluation (MMSE) and depression symptoms (GDS): preliminary data

Campana F, Annicchiarico R, Ettorre E, Scoyni RM, Corbellini A, Cacchioni A, Trani I, Desideri A, Conte G, Marigliano V.
Division of Geriatrics and Gerontology . I Clinica Medica, Policlinico Umberto I, University "La Sapienza", Rome

The Study concluded the first phase of collecting data: the survey of deaths and the collection of follow up data have started. The Centers that participated to the study were 25 and they were divided in 4 groups according to the different living situations taken into account.
We have interviewed 377 people. Their average age was 88.7 (SD =3.3) in a range of 85-101 (214 women 63.9%, 88.7 +/- 3.4; 135 men 36.1%, 88.6+/-3.3).
Interviews were conducted using a questionnaire that included evaluation scales and among them the Mini Mental State Examination (MMSE- Foltain, 1975) to investigate cognitive status and the Geriatric Depression Scale (Yesavage, 1982) to evaluate depressive symptoms.
Preliminary data analysis gave the results showed in the tables

Table 1- average score +/- SD of MMSE

group	MMSE	F	M
1	21.6 +/- 6.6	20.2 +/- 6.5	21.4 +/- 6.6
2	21.6 +/- 7.9	19.5 +/- 8.0	22.9 +/- 7.2
3	18.3 +/- 7.5	17.9 +/- 6.7	18.9 +/- 8.7
4	14.5 +/- 8.1	15.0 +/- 8.2	12.4 +/- 7.4
1-4	19.8 +/- 7.4	19.1 +/- 7.3	21.0 +/- 7.4

Table 2- average score +/- SD od GDS

group	GDS	F	M
1	11.4 +/- 6.7	12.2 +/- 6.7	10.1 +/- 6.5
2	10.8 +/- 6.5	12.5 +/- 6.7	8.2 +/- 5.2
3	9.5 +/- 7.5	10.1 +/- 7.4	8.4 +/- 7.7
4	14.4 +/- 5.8	14.8 +/- 6.1	12.8 +/- 3.0
1-4	11.1 +/- 6.8	12.1 +/- 6.8	9.4 +/- 6.4

The SMILES is coordinated by Prof. Vincenzo Marigliano in the Longevity Study Group of SIGG (Italian Society of Geriatrics and Gerontology). Dr.Fabio Campana, Dr.Roberta Annicchiarico, Dr.Evaristo Ettorre, Dr.Walter Gianni belong to the methodology group.
Partecipant Centers are 25: UO1 Sassari Dr A. Nieddu, Dr G. Angius, Dr.V.G. Mura; UO2 Vasto Dr F. Guarino; UO3 Noale Dr. A. Bordin, Dr. A. Bellemo, Dr. M. Lo Storto; UO4 Loiano Dr. D. Panuccio, Dr.G Cane; UO5 Napoli Prof. F. Rengo, Dr.L. Forgione, Dr. V. Canonico; UO6 Canosa Dr. S. Astolfi, Dr.M. Cannone, Dr.M. Calitro; UO7 Alba Dr.P. Pieroni, Dr.F. Cravero, Dr. F. A. Fava; UO8 Ancona Prof.E. Paciaroni, Dr.Tomassini; UO9 Acri Dr.F. Florio, Dr.M. Giudice, Dr.V. Ritacco; UO10 Nola Prof. F. Coppola, Dr V. Strocchia; UO11 Troina Prof.F. Feruglio, Dr. R.S. Spada, Dr G. Roccasalva; UO12 Modena Dr.R. De Gesu; UO13 Campobasso Dr.C. Dentizzi; UO14 Cesena Prof.P. Sartoni, Dr.D. Burrioli; UO15 Zingonia Dr.S. Mosconi, Dr.E. Petro, Dr.L. Rusconi; UO16 Valle di Maddaloni Prof.R. Cerqua, Dr.M. Califano, Dr.F. Marotta; UO17 Piedimonte S.Germano Dr.F. S. Caserta, Dr.P. Cervera, Dr.D. Fabbrocile; UO20 Viterbo Dr.I. Berni, Dr.P. Ballarini; UO21 Lecce Prof.G. Garzya, Dr.M. Garzya, Dr.G. Lecciso; UO24 Massa Carrara Prof.U. Bola, Dr.B. Bianchi; UO26 Rome Prof.G. Riondino, Dr.A. M. Brancati, Dr.A. Assisi; UO29 Montefalcione Dr.M. Ciarimboli, Dr.P. Grimaldi, Dr.A. Tornatore; UO 32 Cagliari Prof.P.F. Putzu, Dr.E. Maccioni, Dr.O. Catte; UO33 Cosenza Prof.F. Corsonello, Dr.B. Mazzei, Dr.A. Carelli; UO35 Albano Dr.F. Campana, Dr.R. Annicchiarico, Dr.E. Ettorre.

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DEVELOPMENT OF ON-LINE GERIATRIC DENTAL TEACHING MODULES

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Wisconsin Geriatric Educ. Center, Marquette University,
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It has been estimated that while the population aged 65 and over will increase by 104 percent from 1990 to 2030, the number of teeth at risk in this age group will increase by 153 percent. This is expected to lead to an increased need for dental services. Greater variability in dental health, prevalence patterns, and social changes affect the amount and type of dental treatment. The mix of dental providers serving older patients creates challenges for consultation and treatment. Currently, three groups of practitioners provide treatment: community dentist; practitioners in non-traditional settings; and academic geriatric dentist. Each group's decisions for treatment are based on their understanding of the epidemiology of oral health, practice setting and equipment. With the ongoing changes in treatment philosophies and the introduction of new technologies to manage the health care of the elderly patient, it is critical that practitioners have access to the most current information to continually update their proficiency in patient management and treatment. This poster session

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will describe the development of online dental teaching modules. These modules discuss existing dental data and treatment options pertinent to the gerontological and clinical considerations on oral health in the older adult.

A DENTAL SCHOOL GERIATRIC CLINIC AND A CHARITY GERIATRIC INSTITUTION A SUCCESSFUL ASSOCIATION

D M P Padilha, J Baldisserotto, L Soll, S Bercht, E Dickie, Faculdade de Odontologia, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

The number of elderly people is increasing in Brazil At the 2025 year the older Brazilians will be 32 million of subjects, 16% of population The oral status of younger population is increasing in present but the oral health among elderly subjects is poor

The aim of this work is to show the association experience of a Geriatric dentistry clinic from a Dental School of Government University and a Charity Geriatric Institution

The theoretic course includes the most important subject in Geriatric dentistry and in the practical work the students have opportunity to operate in team choosing and performing better treatment according to elderly needs Cases report for academic meetings are prepared covering all subjects studied in theoretic courses and performed at the clinic, including Caries management oral hygiene instruction, prosthetic special appliances, tooth extraction, etc

The experience has been very successful, giving many advantages to elderly and students The elderly have regular attention and treatment in the dentistry field and the students have experience in that new academic subject preparing themselves to the new age structure in Brazil

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QUALITATIVE AND QUANTITATIVE APPROACHES TO DOCTOR-PATIENT INTERACTIONS WITH TERMINALLY ILL PATIENTS

T. Prohaska, University of Illinois at Chicago, Chicago, IL 60607

S. Stahl, National Institute on Aging, Bethesda, MD

Participants:

S. Bowler, E. Alldredge, Z. Wang (REDA International, Inc., 11141 Georgia Ave., Wheaton, MD 10902) A Model to Assess Doctor-Older Patient Interactions and Patient Outcomes.

J.R. Levin (UCLA School of Public Health, Los Angeles, CA 90095) Defining and Measuring Successful Communication about Care Goals Between Older Breast Cancer Patients and Their Physicians.

D.L. Morris, C. Musil, M. Haug, C. Warner (Case Western Reserve University, Cleveland, OH 44106) Physician Support for Family Caregivers During Care Recipients' End of Life.

R. McCann, R. Frankel, J. Chodosh, P. Katz, E. Naumburg, W. Hall (University of Rochester/Rochester General Hospital, Rochester, NY 14621) End of Life Discussions: The Use of Video-reviews in Faculty Development and Resident Education.

Discussant:

M. Greene (Brooklyn College, Dept. Of Health & Nutrition Sciences, Brooklyn, NY 11210)

While research on doctor-older patient interactions has begun to address the dynamics of various medical encounters, relatively little attention has been directed toward communication issues pertaining to terminal illness and end-of-life care. Using both qualitative and quantitative approaches, four papers address doctor-patient communication issues around end-of-life care from three perspectives: the physician, the terminally ill older patient and the patient's caregiver.

One paper provides an overall framework for doctor-patient interactions by developing a theoretical model utilizing the three perspectives to predict patient compliance outcomes. The second paper applies qualitative data from breast cancer patients and their physicians into a theoretical model. The third paper examines physicians' communication and support of terminally ill patients' caregivers from the perspective of the family; and the last paper uses focus group data to develop end-of-life communication skills training for medical residents on a geriatrics rotation.

Discussion will focus on theoretical constructs and outcome measures across papers, and suggest strategies for successful physician communication and future directions for research.

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AUTOBIOGRAPHY AND AGING: POTENTIALS, PROBLEMS, PROSPECTS

H.J. Berman, University of Illinois-Springfield, Springfield, IL 62794-9243

Participants:

B.F. Waxman (University of North Carolina-Wilmington, Wilmington, NC 28403-3297) The Partnership of Autobiography and Reader-Response Theory: Challenging Ageism and Reconceptualizing Later Life

A. Wyatt-Brown (University of Florida, Gainesville, FL 32611-5454) Autobiography and the Mask of Aging

H.J. Berman (University of Illinois-Springfield) Autobiographical Writing and Knowledge of Aging: Who do you trust?

Discussant:

J. Gubrium (University of Florida, Gainesville, FL 32611-5454)

Published autobiographical writing constitutes a rich source of information about the self in later life. In autobiographical writing, people draw on culturally-available interpretive constructs to create self-stories. Articles in the popular press attest to the explosion of interest in autobiographical writing -- a fact which, in itself, warrants consideration by gerontologists. Using theoretical perspectives drawn from philosophy, psychology, and literary criticism, this symposium will explore the potentials, problems and prospects for the incorporation of autobiography into the study of aging. Questions considered will include the authenticity in autobiographical writing; the blurring of distinction between fiction and life-writing; gender differences in representation of self and other; and the relevance to interpretation of autobiography of reader-response theory, a perspective which addresses how and why a reader's attitude toward aging may be transformed by reading powerful autobiographies about aging and elders.

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PERSONALITY AND LONGEVITY: IS WHO WE ARE RELATED TO HOW LONG WE LIVE ?

M.H. Silver, Harvard Medical School Division on Aging, 643 Huntington Ave., Boston, MA. 02115

Participants:

C.L. Johnson (Med. Anthro., U. of Calif., San Francisco, CA 94143). Emotional Strategies in Adapting to Long-Term Survivorship.

J.S. Tucker (Dept of Psych. Brandeis U., Waltham, MA 02254) and H.S. Friedman, K.M. Clark , L.R. Martin, & J. E. Schwartz (Dept. Of Psych.,University of Calif., Riverside, CA 92521). Personality and Longevity Across the Life Span.

M.H. Silver, E. Bubrick, E.I. Jilinskaia, T. Perls . (Harvard Medical School Division on Aging Boston, MA 02115). Is There a Centenarian Personality?

Discussant:

M. Gatz, Dept. Of Psych., U. Of SC, Los Angeles, CA 90089.

Life style factors that impact on physical health, such as exercise, nutrition and non-smoking, are well researched influences on longevity. As the interaction of biopsychosocial factors on health and longevity is becoming more widely recognized, the possible contribution of personality factors to longevity has gained attention. This symposium brings together a group of researchers who address the question of how personality and other psychological factors may relate to the potential for long life. These widely varied studies include findings from a 70-year-longitudinal study which show that sociability and optimism may not be associated with long life. A population based study of centenarians has found evidence of a personality trait that may be associated with the ability to handle stress. A qualitative study of survivorship characteristics in the very old addresses the factors that enable them to maintain subjective well-being despite increasing disabilities.

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RELIGIOSITY AND HEALTH AMONG RURAL OLDER ADULTS

T.A. Arcury, Center for Urban & Regional Studies, University of North Carolina, Chapel Hill, NC 27599, S.A. Quandt, Department of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157.

Participants:

J.M. Armer & V.S. Conn (University of Missouri-Columbia, School of Nursing, Columbia, MO 65211) Exploration of Spirituality, Rural Residence, and Health Among Diverse Elders.

J. Mitchell (Center on Aging , East Carolina University, Greenville, NC 27858) Beyond Church Attendance: The Measurement of Religiosity Among Rural Older Adults.

W.J. McAuley, L. Pecchioni, J.A. Grant (University of Oklahoma Health Sciences Center, Oklahoma City, OK 73190) Personal Accounts of the Role of God in Health and Illness among Older Rural African American and White Residents .

T.A. Arcury (Center for Urban & Regional Studies, University of North Carolina, Chapel Hill, NC 27599), S.A. Quandt, R.A. Bell, J. McDonald, M.Z. Vitolins (Department of Public Health Sciences, Wake Forest University School of Medicine, Winston-Salem, NC 27157) Faith and Health Self-Management of Rural Older Adults.

Discussant:

W. Gesler (Department of Geography, University of North Carolina, Chapel Hill, NC 27599)

Religiosity has an important relationship to health among older adults in the United States. Research on this relationship has conceptualized religiosity as having several dimensions: belief or faith, participation in organized church activities, religious commitment, and spirituality. For all of these, rural residents demonstrate a high degree of religiosity. However, research into the role of religiosity in the health of rural older adults needs to be developed. Issues include the measurement of religiosity in a deeply religious population, the meaning that older adults apply to religion, the variation in religiosity in ethnically diverse rural populations, and how the religiosity affects health. The papers in this symposium address several of these important issues. With data from different U.S. rural regions, these papers address the development of a measure of religiosity; analyze the role of faith and belief in health care and illness; and consider ethnic differences in the of role religiosity in health.

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POSITIVE AND NEGATIVE SUPPORT: IMPLICATIONS FOR WELL-BEING IN LATER LIFE.

J.P. Reinhardt, The Lighthouse Inc., 111East 59th St., New York, NY 10022.

Participants:

K. Heller, R.W. Swindle, Jr., D.B. Alexander, S.M. Allen, & M.F. Wyman (Department of Psychology, Indiana University, Bloomington, IN 47405) Network Interactions and Depression in Caucasian and African-American Older Women.

J.P. Reinhardt. (Arlene R. Gordon Research Institute, The Lighthouse Inc.) Support Exchange and Mental Health in Elders with Chronic Vision Loss.

K.S. Rook, (School of Social Ecology, University of California, Irvine, CA 92697). Mood and Positive Versus Negative Social Exchanges: A Daily Diary Analysis.

R. Blieszner, K.A. Roberto, K. Allen. (Center for Gerontology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061). Older Adults' Preferences for Future Care: Familial Support versus Formal Plans.

Discussants:

T. C. Antonucci (Institute for Social Research and Department of Psychology, University of Michigan, Ann Arbor, MI)

M. Cantor (Fordham University Graduate School of Social Service, New York, NY)

Decades of empirical research have examined the effects of social support on physical and mental health in older adults, especially those who are experiencing stressful life experiences. Recent conceptualizations of social support have expanded to include both positive and negative aspects of support (e.g., conflict) on well-being. Heller and colleagues. will discuss positive and negative responses of network members for women with three levels of depressive symptomatology who are undergoing three kinds of life stressors (health problems, social losses, interpersonal disagreements). Reinhardt will talk about the effect of positive and negative aspects of support given and received by elders adapting to age-related vision loss. Rook will use daily diary data to study the links between positive versus negative social exchanges and congruent dimensions of mood in elders. Finally, in a qualitative investigation, Blieszner and colleagues will examine anticipation of family support and formal services for future long-term care needs in elders who may or may not be experiencing family conflict. The importance of using expanded conceptualizations of social support will be discussed.

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DIMENSIONS OF SUCCESSFUL AGING: HEALTH COMMUNICATION NETWORKS AND PREVENTIVE HEALTH BEHAVIORS, L.Levy-Storms, Department of Health Promotion and Gerontology, University of Texas Medical Branch, Galveston, Texas 77555-1028.

Rowe & Kahn (1997) distinguish between "usual" and "successful" aging with the former being nonpathologic but at a high risk and the latter nonpathologic but at a low risk for disease. The purpose of this paper is to assess the relationship between social networks and health behaviors as important dimensions of successful aging. Data come from a survey of 290 older (age 50+ years) Samoan women who attended 40 randomly sampled Samoan churches in Los Angeles County in 1996-97. Specific health communication network characteristics derive from respondents naming other women with whom they talk to about health matters. Summary scores of two types of preventive health behaviors: chronic health screening (e.g., hypertension, mammography, diabetes, etc.) and general preventive health practices (e.g., salting food, smoking, drink alcohol, etc.) are regressed on individual and network variables. The analyses reveal a positive relationship between their informal health communication networks and *general* preventive health behaviors and no association with chronic health screening. These results suggest the different influences of informal vs. formal networks on preventive health behaviors. This study offers new ways to measure successful aging constructs in future research, shows the interrelationship between them, and discusses their inherent complexity.

SELF MANAGEMENT OF CHRONIC ILLNESS FOR OLDER BLACKS AND WHITES

M. Silverman, D. Musa, B. Kirsch, S. Smola, University of Pittsburgh, Graduate School of Public Health, University Center for Social and Urban Research, Pittsburgh, PA 15261

The recognition that professional care constitutes the minority of health care provided to people today regardless of age has led researchers to realize that self care is the major component of illness management. However, not much is known about the self care experiences of older adults with chronic illnesses or about minorities. In a study of 221 older blacks and whites with arthritis, COPD, diabetes, or heart disease, we found that there are commonly used self care behaviors across these illnesses. Most common was the use of medications (94.6%) followed by the use of health promotion/prevention behaviors (76.9%). Some strategies were used more commonly in one illness than another. For example, the use of illness monitoring, quite common for diabetes, was relatively unused for the management of the other three illnesses. However, whites used this strategy almost twice as much as blacks (76.9% to 33%). There were other differences in self care type by race, with whites reporting more modification of physical and functional activities in arthritis management (62.2% for whites vs. 38.2%) while blacks reported more health promotion activities (72.7% for blacks vs. 56.8%). Most notable in COPD management was the difference between blacks and whites in the use of environmental/technical supports with 78% of whites and 25% of blacks reporting use of this strategy. This paper presents the findings of this study and explores the types of self care used within these broader categories and the reasons for their use.

EXPLORING THE CORRELATES OF SELF-CARE COPING STRATEGIES AMONG THE ELDERLY WITH FUNCTIONAL STATUS LIMITATIONS

K. C. Huang, R. K. Sharma, C. Jeng Lin, K. S. Peterson, Department of Health Services Administration, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA 15261, R. Day, Department of Biostatics, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA 15261.

The objective of the study was to examine the patterns of self-care behavior of the elderly in dealing with functional status limitations, using data from the National Survey of Self-Care and Aging: Baseline, 1990-1991. The data set included a national probability sample of 3,485 noninstitutionalized Medicare beneficiaries. A conceptual model was formulated to explore the associations among demographic factors, socioeconomic resources, decrements in functional status, perception of health status, stressful life events, and the patterns of self-care coping strategies (i.e., changes in behavior, changes in environment, use of special devices, use of non-prescribed medications, and doing nothing). Stepwise multiple regression, hierarchical regression, and logistic regression analyses were preformed to identify predictors of self-care activities. The data revealed that demographic and socioeconomic factors appeared not to be consistently related to the practice of self-care. The prevailing predictors of the patterns of self-care strategies were decrements in functional status and stressful life events. The likelihood of engaging in self-care activities, except doing nothing, increased as the severity of functional disability increased. If stressful life events ever happening was associated with almost all self-care strategies, except use of non-prescribed medications.

PERSONALITY, HEART DISEASE AND DECISIONS ABOUT HORMONE REPLACEMENT THERAPY

L.A. Bastian, H.B. Bosworth, I.C. Siegler, Departments of Medicine and Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, N.C. 27710.

As the Baby Boom Generation ages, millions of post-menopausal women will be making decisions about Hormone Replacement Therapy (HRT). Women who use HRT have been shown to be healthier with fewer heart disease risk factors. The purpose of the present study was to determine if women who have ever used HRT have different personality profiles compared to women who have never taken HRT. The subjects (n=50) are part of a larger Models of Personality and Disease Study examining the impact of personality on the stress of being evaluated for heart disease with cardiac catheterization. Women, of whom 30% had significant coronary artery disease, were given the NEO-FFI as part of a mail survey and were asked about heart disease risk factors and use of HRT. In this 1940-1946 birth cohort, mean age was 49 years, mean education was 13.7 years, 71% were white, 29% were African-American, and 80% had ever used HRT. Ever HRT users had significantly higher levels of Openness (49.04 vs. 39.19) and significantly lower levels of Conscientiousness (51.98 vs. 57.07) compared to non-users. Results indicate that HRT use may be associated with personality which may mediate the protective effect of HRT on heart disease.

CHANGES IN HEALTH STATUS AMONG NEW COHORTS OF ELDERS IN SWITZERLAND : A COMPARISON 1979-1994

C. J. Lalive d'Epinay, C. Maystre, J.-F. Bickel, H.M. Hagmann, J.-P. Michel, J.-F. Riand
Center for Interdisciplinary Gerontology, University of Geneva, 59 rte de Mon-Idée, CH-1226, Thônex (Switzerland).

Is the health status of elders improving or deteriorating among new cohorts of elders ? On the basis of the NLTCS data, Manton et al. (1994, 1997) give evidence of declining disability rates, although the discussion remains open (Crimmins et al, 1997) and is mainly limited to the USA.
Using two cross-sectional surveys based on the same design and conducted in Switzerland one in 1979, and the second in 1994 (stratified samples, age 65-94 ; N_{1979} = 1519, N_{1994}= 1583), changes in *functional health*, *depressive symptoms* and *self-rated health* are examined.
From this analysis, it was determined that globally, there is a significant improvement in all three dimensions of health in the 1994 study participants compared to the 1979 study participants. Most improvements were noted in the new cohort born between 1915-1929 and aged 65-79 in 1994, although the cohort born between 1900-1914 and aged 80-94 in 1994 also shows a significant improvement in the areas of depressive symptoms and self rated health (and stability in functional status) compared with the cohort born between 1885-1899 at the same age.
The impact on health of age and educational and socio-professional changes are also analyzed, the latter being very significant on functional health.

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ELDERS' END-OF-LIFE DECISIONS: A COMPARISON OF TWO STUDIES

V. G. Cicirelli, P. MacLean, L. Cox. Department of Psychological Sciences, Purdue University, West Lafayette, IN 47906.

Objectives of the two studies were: (a) to determine elders' views regarding end-of-life decision options (maintain life, end life, let others decide), (b) to determine how views are related to psychosocial and background variables, and (c) to compare findings for a sample of elders attending senior centers with a random sample of elders in the community. Study I included 265 Whites aged 60 to 95 from 18 senior centers; Study II was a random sample of 200 Whites aged 60 to 90. All responded to 17 end-of-life decision scenarios, and completed psychosocial and background measures. Results of analysis ($p < .05$) indicated that, compared to Study I, Study II elders were less likely to want to maintain life and more likely to want to end life; they did not differ on letting others decide. Differences between the groups were attributed to differences in education and occupation. Predictors in regression analyses were similar in both studies: End-of-life decisions were related to religiosity, quality of life values, and externality, but not to well being or social support. (Supported by the AARP Andrus Foundation.)

RELIGIOUS AND SPIRITUAL THEMES IN AFRICAN AMERICAN, MIDDLE-AGED DAUGHTERS' RESPONSES TO THE DEATH OF THEIR ELDERLY MOTHERS

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Practitioners and counselors have often recognized the significance of religious and spiritual themes in their work with clients coping with grief and loss issues. Few studies, however, have examined the importance of these themes, from a strengths perspective, in the coping responses and life restructuring efforts of African American, middle-aged children after an elderly parent dies. This study addresses this gap by reporting findings from an exploratory, qualitative study which examined the meaning and significance of an elderly mother's death for a non-clinical sample of African American, middle-aged daughters living in Philadelphia, Pennsylvania and Southern New Jersey. Ethnographic interviews lasting 1 1/2 to 2 hours each were conducted with thirty women ranging in age from 39 to 64 whose mothers had died 6 to 9 months prior to being interviewed. Their deceased mothers also represented the second parental death for each daughter. Findings indicate that perceptions of death as a transitional phase leading to life in another form, a process controlled by a just and loving God, characterized most daughters' accounts. Key thematic patterns, however, emphasizing sacrifice, sanctification, restoration and reunification emerged from these accounts denoting a coping resource process which seeded hope that the mother-daughter tie would continue in some form beyond death, enhanced daughters' self-esteem by bonding her to a mother "sanctified" after death and provided a role model to guide daughters in handling their own eventual death and decline. This study stands to enhance practitioner and educator understanding of the normative ways in which religious and spiritual themes impact bereavement. This research was supported by a grant from the National Institute on Aging through the Polisher Research Institute, Philadelphia Geriatric Center, Dr. Robert Rubinstein, P.I.

AROUSAL OF PAINFUL EMOTIONS IN BEREAVED OLDER ADULTS: HELPFUL OF HARMFUL?

J.A. Bogaards, D.L. Segal, & C. Chatman, Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO 80933-7150.

Investigated the relationships between the arousal of positive and negative emotions with therapeutic outcome in distressed bereaved older adults (N = 30; mean age = 67.0; range = 51 to 85) participating in an exposure intervention according to the paradigm developed by Pennebaker (1985). Participants verbally disclosed their thoughts and feelings about loss of their spouse in 4 20-minute vocal expression sessions within a 2-week period. Overall, participants demonstrated significant decreases in hopelessness, avoidance, intrusive thoughts, and depression from baseline to one month follow-up. Correlational analyses indicated that higher levels of negative affect (summed PANAS scores) were associated with greater decreases in depression, hopelessness, intrusive thoughts, and avoidance from pretest to follow-up. In contrast, correlations between positive affect and dependent measure change scores were all non-significant. This research suggests that arousal of painful emotions is related to therapeutic changes in bereaved older persons although arousal of positive emotions appears unrelated to therapeutic outcome. Implications for clinical practice and research are discussed.

IMPACT OF A CONTINUING CARE RETIREMENT COMMUNITY ON PLACE OF DEATH.

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While the vast majority of older Americans die in hospitals, we sought to assess the impact of the services provided by a continuing care retirement community (CCRC) on place of death.

A retrospective chart review was done for all deaths of residents of a North Carolina CCRC from September 1992 (when the CCRC opened) to December 1997. This CCRC provided primary medical care via an on-campus clinic staffed three times a week by a university geriatrician who also followed CCRC patients in the hospital.

There were 86 deaths during the study period, and the average age of the decedents was 83 years. Ten deaths or roughly 12% occurred in the hospital (in contrast to 1992 Vital Statistics data that report 59% of deaths in this age group occur in hospital). Of these ten deaths, only three occurred in the intensive care unit with no ICU stay greater than seven days.

We speculate that the M.D. continuity of care, including transfer of Advance Directives across the different clinical settings, explains why the patients in this study died at home on the CCRC campus.

EPIDEMIOLOGY OF HOME DEATHS IN A RACIALLY-MIXED URBAN-RURAL COMMUNITY

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U.S. population statistics on home deaths were not available prior to 1989 and have never been routinely stratified by age. Combining Health Care Financing Administration (HCFA) data with data from the Established Populations for the Epidemiologic Study of the Elderly (EPESE) at Duke University, a longitudinal (1986-1996) survey of 4162 elders in the Piedmont of North Carolina, we examined age-related differences in incidence of home deaths during the past decade. Controlled analyses suggested that home deaths were more likely than hospital deaths when elders were functionally and cognitively intact, but were unrelated to demographic, insurance, health service use, or social support differences. Home deaths were more likely than nursing home deaths when elders were younger, had more social support, lived either with a spouse or with more than one non-spouse, and spent fewer nights in a hospital or nursing home in the year prior to death. Examination of the prevalence and predictors of home deaths may help elders, their families, and policy-makers understand the discrepancy between where persons wish to die (primarily at home) and where they actually die (primarily in hospitals).

A LONGITUDINAL ANALYSIS OF WISHES FOR LIFE-SUSTAINING TREATMENTS AMONG ISRAELI ELDERS

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This study continues an investigation into wishes for life-sustaining treatments (LSTs). The purpose of the present study is to examine the stability in wishes for LSTs and to identify social factors that influence changes in wishes. The study was conducted on a random sample of Israeli Jews aged 70 and older. From the baseline sample of 1138, 638 persons were able to be interviewed three years later. The correlation between baseline wishes for LSTs and wishes 3 years later were only moderately correlated, $r = .47$. In year 3, wish for LST was regressed on the following baseline variables: wishes for LSTs, ADLs, perceived health, social contacts, influence from past experience with others' illnesses, and the baseline expression of will to live. Year 3 measures of perceived health, social contacts, and influence from others' illnesses were included. The R^2 equalled .35. Persons whose baseline perceptions of health were poor or who had a will to live wished for LSTs. Those who were influenced 3 years ago by others' illnesses wanted less treatment, but recent experience with others' illnesses contributed to stronger wishes. Increases in social contacts also contributed to greater desires for LSTs. This research emphasizes the importance of the social situation in determining wishes for LSTs.

Measuring end-of-life care: Shifting the paradigm.

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Despite increased demand for palliative care services, no well-established standardized instrument exists to assess the quality of that care. Traditional measurements, such as number of days in an intensive care unit, pain measurements, and presence of advance directives, only loosely correlate with actual patient and family satisfaction. Traditional measurements are also based on assumptions of what patients value in end-of-life care. No study has first assessed the preferences of providers, patients, and family members and subsequently developed a clinical instrument to assess the quality of dying. This paper presents the results from focus group discussions and in-depth interviews, the first phase of instrument development, with each of these groups. We document similarities and differences in groups' preferences for considerations at the end-of-life. Our findings suggest participants define a broader array of preferences than found in the current literature. We discuss an integrated bio-psycho-social model of assessment, based on their preferences. We also present initial results from the quantitative national survey phase of the study.

Variations in Funeral-Related Costs of Older Adults: Do Preneed Funeral Contracts Lower Costs?

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There are over 2.5 million prepaid funeral contracts in force in the U.S. Most of these have been sold to older adults in anticipation of their own death. We asked, "Are final expenses paid through a preneed funeral contract less than those paid after a death?"By regressing total final costs on preneed status and controlling for burial versus cremation status, 42 percent of the variation in final costs (i.e. funeral and burial costs combined) could be explained. While final costs paid by preneed contracts were $1,600 less, being cremated was much more of a driving force for lower costs. Final costs of cremated decedents were on average $4,400 less.

Many factors could explain why prepayment resulted in lower costs: people concerned about costs may be more likely to prepurchase; people who make their own arrangements may spend less than their survivors would; or perhaps people who are not pressed by time may shop around and be more informed on options and costs. Before gerontologists recommend preneed funeral contracts, further study into why preneed contracts result in lowers costs is called for. Preneed funeral contracts are not without risk, and other options for prepayment are available.

END OF LIFE ISSUES AND RELIGION IN COMMUNITY ELDERLY.

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Attitudes toward death and terminal care are examined as they are associated with measures of religion in 463 community dwelling elders age 70+. Measures include religious identification (Protestant (52%), Catholic (19%), Jewish (18%)), frequency of church attendance, importance of religion/spirituality in daily life (R/S), 6 item death anxiety index, 3 item Advance Directives index (ADs), and years of wished for life under conditions of dependency, pain, and dementia (YrsTL). Overall, 84% had definitely heard of ADs, but only 42% had filled one out. End of life concerns were more strongly associated with pervasive life long traits (religious identification, race and education) than current quality of physical and functional health, social relations, time use, mental health and affect. Protestants and Catholics attended church more, and reported R/S more than Jews. While the 3 religious groups did not differ in YrsTL, they did differ in death anxiety (Jews > Catholics > Protestants) and in use of ADs (Jews > Catholics & Protestants). Higher church attendance and higher R/S were associated with more YrsTL. Regression analyses predicting ADs ($R^2 = .19$) and Death anxiety ($R^2 = .21$) help clarify the above findings.

Supported by NIA R01 AG11995.

"WHO WILL I TOSS A SNOWBALL TO NOW?": GRIEF AT THE DEATH OF COMPANION ANIMALS.

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Grief in response to the death of a companion animal has been described in anecdotal reports, but rarely investigated empirically. For researchers, locating the bereaved can be difficult and, once found, descriptions of grief may be inhibited due to the disenfranchised status of their loss. However, a new form of tribute, memorials in cyberspace, may provide needed data on the impact of companion animal death. The present study describes 92 pet memorials and compares them to 85 memorials written for people, all sampled from the cyberspace cemetery, Virtual Memorial Gardens. Memorials were coded for demographic information about the deceased, characteristics of the authors, and various content issues. Pet and human memorials did not differ on most variables, including: length (M=64 words), display of emotion, mention of an afterlife (present in over 30% of memorials), listing of survivors (included in over 40% of memorials) and intended audience (with over 40% being addressed to the deceased).. However, significantly more pet memorials were written by multiple authors, discussed the disposition of remains and stressed the unique love of the author for the deceased. As part of the significant difference in tone, authors of pet memorials were more likely to pledge that they could never love anyone as they had loved the deceased. The surprising lack of significant differences in variables like length (despite the fact that pets have no occupation or formal affiliations to elongate their memorials) will be examined in relationship to disenfranchised grief, while differences in tone, authorship and style will be presented as demonstrations of continuing bonds with the dead.

NO COOKIE BIG ENOUGH: MOTHERS AND GRANDMOTHERS COPING WITH THE DEATH OF A GRANDCHILD.

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Changes in mortality rates have altered family experiences with death, particularly death of the very young. With increasing longevity, the structure of families has also changed; it is more likely that grandparents will be part of the grieving family if a child does die. Grandparenthood is a role prominent in both middle and old age and holds significant meaning for most grandparents. The relationship between grandchildren and grandparents is often mediated by parents. Little research has focused on the connection between grandparent and parent bereavement.

This paper reports on an exploratory study of the relationships between mothers and grandmothers who grieve the death of a child/grandchild. Two focus groups were conducted, one with mothers and another with grandmothers. Members of each group discussed their own difficulties grieving the death of the child or grandchild and the difficulties faced by their mothers or daughters. They also identified similarities and differences in expression of grief, how grandmothers and mothers provided support to one another, and how relationships had changed following the death. Findings indicate that mothers and grandmothers have a general understanding of each other and are a major source of mutual support. At the same time, important differences emerged emphasizing the perspectives unique to each role. Understanding these similarities and differences is critical in helping all family members cope with tragedy.

PREDICTORS OF ADULTS' ATTITUDES ABOUT FUNERALS

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Attitudes about funerals and the funeral industry were predicted for 350 adults, ages 18 to 88, who attended a funeral of a family member or close friend within the past two years. Predictors were grouped into theoretical sets: demographic variables (age, income, education), knowledge about funerals, belief in life after death, emotional closeness to the deceased, perceived preventability of this death, overall satisfaction with this funeral, other psychological factors specific to this funeral (difficultly dealing with the funeral and post-funeral situations, meaningfulness of this funeral, participation in funeral rituals), and physical and environmental factors for this funeral (length of service, outside weather and temperature conditions). A multiple regression model showed less education, greater belief in life after death, and greater satisfaction with and meaningfulness of this funerals were predictions of more positive funeral attitudes , $F(345,4) = 47.17$, $p < .001$. These results show both general and experience specific predictors of funeral attitudes. As this research was cross-sectional, causal direction between psychological factors can not be determined.

THE IMPACTS OF WORKING IN PALLIATIVE CARE ON OCCUPATIONAL THERAPISTS

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Palliative care is an expanding field of medicine and is being researched at length, however, there is a paucity of literature that has focused on the experiences of the therapists who work with the dying. This presentation will describe the results of a qualitative research study. The purpose of the study was to explore the impacts of working in palliative care on occupational therapists; the impacts on their professional practice, their social relationships, and their personal feelings, values and beliefs about what is important in life.

This study consisted of conducting interviews with eight occupational therapists who work in a large urban centre in a variety of palliative care settings. Audio-taped interviews were transcribed and analyzed for recurring themes emerging from the data. Identified themes have been confirmed in subsequent interviews with the same research participants. The themes included altered professional practice, changed social relationships, sense of hurting, satisfaction, and spirituality. As a previously unexplored area of research, a qualitative descriptive approach proved valuable to developing an understanding of the impacts of working in palliative care on occupational therapists.

COLLEGE STUDENTS' PERSPECTIVES OF THE LOSS OF A GRANDPARENT

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The purpose of this study was to explore how college students perceive the loss of a grandparent. 149 undergraduate students were asked to chose the most significant person in their life who had died and then respond to a questionnaire that consisted of a series of demographic questions regarding their ethnic and religious background, their parents' ethnic backgrounds, and their grandparents' ethnic backgrounds, as well as six open-ended questions about their relationship to the person who had died, the circumstances of the death, how old the student was at the time of the death, the amount of contact the student had with the person while he or she was dying, how the student was told of the death, and what the reaction was to the death. Of the 149, a sample of 85 participants ranging between the ages of 17 and 22 chose a grandparent as the most significant person in their life who had died. A qualitative analysis of the open-ended responses paid particular attention to themes involving the influence of culture, religion, and family rituals in the loss process, as well as the age of the student and the age of the grandparent at the time of the death. Due to small ethnicity sub-samples, culture was not found to be a significant influence. However, the results support the hypothesis that age, religion, and family rituals played an important role in students' perception and adaptation to the loss of a grandparent.

BETWEEN TWO WORLDS?

Doris Francis, Leonie Kellaher & Georgina Neophytou

The gerontology and life-course literature have generally overlooked the Cemetery as a significant site for understanding the interlinkages of death with age, gender, family, ethnicity and memory (individual and collective) in Western society. This paper re-positions the Cemetery as an important, unexplored locus for cross-cultural research on older persons as they occupy a liminal position on the threshold between life and death. Not only do they link generations, but their Cemetery visiting extends and transforms the experience of the kinship system.

Visiting achieves such transformations by:

1. Transformation of the self;
2. Transformation of the deceased;
3. Transmission of edited knowledge about the family;
4. Transmission of traditions:
   a) about the family, community, ethnic identity
   b) about grave tending
5. Grave tending facilitates the emergence of particular sets of strategies for continuation of self across bereavement.

The data was collected through the ESRC-funded project, **Cemetery as Garden.** This paper focuses upon the roles and activities - both material and cognitive - which characterize older study participants as they:

- visited graves of their spouses, friends and contemporaries;
- visited graves of family, alone or along with other family members;
- were visited and remembered by their kin.

AGE AND SUICIDAL IDEATION IN OLDER DEPRESSED INPATIENTS

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Background: The likelihood of reporting depressed mood apparently decreases with older age. Community studies suggest that suicidal ideation (SI) decreases with age; but this has not been studied in psychiatric inpatients.

Method: Data were obtained from a case-control study of attempted suicide in inpatients 50 years of age and older with major depression. Analyses were restricted to patients who did attempt suicide prior to hospitalization (N=95). Outcome variables were: suicide items on the Hamilton Depression Rating Scale and Structured Clinical Interview for DSM-III-R, Scale for Suicidal Ideation total score and death ideation items, and the Spectrum of Suicidal Behavior. Two logistic regressions were conducted for each outcome, first with age and gender as predictors, then with age, gender, marital status, living situation, and employment status entered simultaneously.

Results: For all outcome variables except the SCID item, younger age was a significant predictor of suicidal ideation; for all outcomes except the HDRS, this relationship was maintained after controlling for other demographic influences.

Conclusion: Even in this age-restricted sample, there is a negative relationship between age and SI. Clinicians who work with older patients should supplement self-report with ancillary sources of information.

Acknowledgments: Supported in part by grants K07 MH01135 and R01 MH51201.

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RURAL OLDER WOMEN: PREDICTORS OF EXERCISE SELF-EFFICACY

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Self-efficacy is a consistently strong determinant of exercise behavior. Much less research has examined constructs that predict exercise self-efficacy. The research on exercise-related constructs among rural elderly women is especially sparse. The purpose of this study was to identify predictors of exercise self-efficacy among independently living rural older women.

This descriptive study measured self-efficacy, perceived benefits of exercise, current exercise behavior, number of perceived exercise barriers, number of exercise self-change processes, age, and subjective health rating. Community-dwelling rural women aged 66 to 97 years were interviewed in their homes (N = 168).

The model accounted for 48% of the variance in exercise self-efficacy. The numbers of barriers to exercise (beta = -.30) and processes of self-change (beta = .28) were the strongest predictors of self-efficacy. Other significant predictors were perceived benefits (beta = .18), health (beta = .16), and current exercise (beta = .16). Age did not predict exercise self-efficacy.

The findings suggest research examining self-efficacy related constructs, and efficacy enhancing interventions, should address perceived barriers to exercise and self-change processes used to modify exercise behavior.

LOW INTENSITY EXERCISE: AN OPPORTUNITY TO MAINTAIN FUNCTIONAL ABILITY AMONG NURSING HOME RESIDENTS

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Research findings document the health benefits of exercise for community dwelling frail older persons. Less is known about the effect of exercise programs with institutionalized elderly. With the increasing numbers of the old-old, a group more likely to be institutionalized, there is a need to maintain the functional ability and delay the onset of functional dependency among nursing home residents. The purpose of this experimental study was to demonstrate improvement or maintenance of functional ability in nursing home residents following a low intensity exercise intervention. Forty subjects (Mean Age=81) were recruited and randomly assigned to a control or experimental group. The experimental group participated in a nurse led low intensity exercise program 3 times/week for 12 weeks. Goniometry was used to assess extension and flexion of knee; dorsi and plantar flexion of ankle joints. Other measures included: Functional Reach Test and Katz Index of ADL. Measurements were made prior to the intervention, at the end of the intervention, and 3 months post intervention. Although no significant increase was found in study variables, the experimental group demonstrated improvement in each variable over time. The planning, implementation, and outcomes of this study illustrate the benefits and challenges of conducting a low intensity exercise program with frail nursing home residents.

EXERCISE IN OLDER ADULTS: DOSE INFLUENCES ON AFFECTIVE RESPONSES

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Physical activity has generally been associated with positive psychological responses in both the lay and scientific press. However, little is known as to the effects that differing intensities of activity have on affective responsivity. This study examined this dose-response relationship in the context of 80 older adults (M age = 66 yrs) participating in light, moderate, and maximal intensity activity. Prior to and following exercise, the participants completed measures of psychological well-being (PWB), psychological distress (PD), and fatigue (FAT). We employed structural equation modeling to test differential responses across the three exercise conditions. There were significant differences between conditions with a gradual decline in PWB and increase in PD and FAT as intensity increased. The moderate activity produced little change in affect, whereas PD decreased and PWB increased in the light condition ($p<.05$). In contrast, the maximal exercise condition resulted in uniformly negative responses ($p<.05$). Findings are discussed in-terms of dose-response considerations in exercise presciption for older adults.

Funded by NIA, Grart # AG12113

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PERSONALITY DYSFUNCTION, COPING STYLES, AND CLINICAL SYMPTOMS: ARE OLDER ADULTS PSYCHOLOGICALLY HEALTHIER THAN YOUNGER ADULTS?

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Differences in personality disorders, coping strategies, and clinical symptoms between younger and older persons were examined. Community-dwelling volunteers completed the CATI, COPE, and BSI. Based on the CATI, personality results (t-tests) revealed that elders were significantly more obsessive-compulsive and self-defeating than younger adults but significantly lower on 10 scales including antisocial, borderline, histrionic, and schizotypal. As assessed by the COPE, older adults reported lower levels of dysfunctional coping strategies than younger adults, including lower levels of venting of emotions, mental disengagement, and use of alcohol/drugs. For the emotion-focused coping cluster, elders were more likely to use religion but less likely to use humor. BSI results for Axis I clinical symptoms revealed that younger adults were significantly higher on 8 out of 9 scales, including anxiety, depression, hostility, and psychoticism, as well as higher on overall distress. Results suggest that younger persons experience higher levels of personality and clinical symptoms and use more dysfunctional coping strategies than older persons, dispelling the myth that old age is associated with inevitable psychological impairment. Clinical implications are discussed.

RELATIONSHIP BETWEEN PERSONALITY FACTORS, ATTACHMENT STYLES, AND REMINISCENCE FUNCTIONS IN GEROPSYCHIATRIC PATIENTS.

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The purpose of this study was to investigate the relationship between reminiscence functions, personality factors, and attachment styles in geropsychiatric patients. Patients in the geropsychiatric outpatient clinic with scores of 21/30 or better on the MMSE and without a primary diagnosis of dementia were administered the Reminiscence Functions Scale (RFS), a measure of the "big 5" personality factors (NEO-FFI), and a measure of attachment styles (Relationship Questionnaire).

Preliminary results (n=24) indicate that total RFS score is strongly positively correlated with extraversion, openness to experience, and conscientiousness. Fearful attachment was significantly negatively correlated with teach/inform reminiscence, and dismissive attachment was significantly correlated with bitterness revival and teach/inform. Agreeableness was positively associated with preoccupied attachment. Results will be discussed via the implications of the above associations for life review therapy

AGE DIFFERENCES IN PERCEPTIONS OF FAMILY FUNCTIONING AND ILLNESS IMPACT IN A RURAL SAMPLE

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Levels of family functioning and perceptions of the impact of illness are compared for three age groups (18-49, 50-64, and 65-88). The results are based on 569 responses to a survey conducted in Laramie, WY in Fall 1996. The instruments used included the Family APGAR, Family Quality of Life Index, Family Discord Scale, and Family Disruption from Illness Scale (FDIS). The sample scored high on the Family APGAR scale, moderate on the Family Quality of Life Index, and low on Family Discord and Family Disruption from Illness. One way analysis of variance with the Scheffe' multiple comparisons test was used for comparing scores. Although the 65-88 age group had significantly higher means than the other age groups for the FDIS and four subscales that involved physical symptoms, there was no difference in means between groups for either the depression/anxiety or behavioral symptoms subscales of the FDIS. The 65-88 age group also had significantly higher means for the Family APGAR and Quality of Life scales. Their mean score on the Family Discord scale was significantly higher than that of the 18-49 age group but significantly lower than that of the 50-64 age group. Study results raise questions concerning the literature emphasizing the degree to which depression and other psychological symptoms are problems for older adults. Further study in both rural and urban populations is certainly warranted.

REVISITING OLDER SUICIDE: A COMPARISON OF ANTECEDENTS BETWEEN MEN AND WOMEN

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Suicide among older persons is a significant public mental health problem, and rates for both older men and women have been increasing. Older white males have the highest rates and have been the focus of most research on geriatric suicide. Studies on gender differences typically report that older women, who commit 19% of suicides, are more likely to have previous attempts, be socially isolated, and suffer from depression. 160 variables were coded from medical examiner files of completed suicides for a random sample of 80 women and 106 men over age 55 from 1993-1997. Sociodemographic data, antecedent conditions, autopsy findings, and physical circumstances were analyzed by marital status for gender differences. Older women were more likely than men to have positive postmortem results for antidepressants ($X^2=5.6$, $p\leq .02$), benzodiazepenes ($X^2=11.1$, $p<.001$), and barbiturates ($X^2=4.9$, $p\leq .03$). Older men and women had about the same rates of depression (32% and 42% respectively). Women were more likely to have had arthritis ($X^2=6.6$, $p\leq .01$) and COPD ($X^2=3.7$, $p\leq .05$). Men were more likely to have had a history of dementia ($X^2=14.7$, $p\leq .001$) and emphysema ($X^2=20.9$, $p\leq .0001$). Women used different methods to commit suicide, (most frequently firearms, 20%, asphyxiation, 22% and overdose, 32%) while most older men used a firearm (68%). Older men and women did not differ significantly in age, occurrence of cardiovascular disease, as well as alcohol and analgesic use. Our results suggest that suicide in older women is more complex than previously thought. Future research using psychological autopsy methods are needed to clarify these differences and investigate the impact of motivation, physical and mental health, and health care on suicide occurring among older men and women

WHY OLDER PEOPLE DRINK: PREDICTORS OF ALCOHOL CONSUMPTION.

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While it is understood that there are various patterns of drinking in which people engage over the life course, the correlates of alcohol consumption are only beginning to emerge. The purpose of the present study is to identify predictors found among a sample of non-institutionalized older adults living in the San Francisco Bay Area.

Information was obtained via a telephone interview in an NIAAA-funded study of 2617 adults 60 years and older (mean = 77). Sixty-seven percent of the total sample consumed alcohol and 45 percent of all the drinkers in the sample had a drink in the 24 hours preceding the interview.

In a hierarchical regression analysis with a measure of quantity/frequency/volume of alcohol consumption as the dependent variable, demographic variables accounted for seven percent of the variance (divorced and never married respondents, males, and those with more income consume more alcohol). Health attributes accounted for an additional four percent of the variance explained (only the number of years a person smoked cigarettes was significantly related). A surprisingly low one percent of the variance was accounted for by life stressors (daily hassles, acute stressors, ability to cope with problems) and activities. Five percent of the variance is explained by the number of reasons respondents gave as important for their own drinking. Implication of these findings are given in the report.

RESPONSIVENESS TO NONVERBAL CONVERSATIONAL CUES AMONG OLDER ADULTS WITH HIGH LEVELS OF OFF-TARGET VERBOSITY.

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Off-Target Verbosity (OTV) is a pattern of speech which has been observed in a minority of older adults, and is characterized by an abundance of unfocussed speech. The purpose of the present study was to examine responsiveness to nonverbal conversational cues among older adults who exhibited high levels of

OTV. Sixty-eight subjects were asked to speak about two conversational topics of their choice. While they spoke, a research assistant manipulated the conversational cues that he/she expressed; first appearing interested, then appearing bored. Analyses of subjects' talk time during each of these conditions showed that although high OTV subjects significantly reduced their length of speech in response to the nonverbal cues signalling boredom, their speech during this condition continued to be excessive, relative to "normal" talkers. In response to nonverbal cues signalling interest high OTV subjects exhibited excessive speech, relative to "normal" talkers. These findings are discussed with regard to the appropriateness of social behaviour exhibited by older adults with high levels of OTV.

HOMICIDE-SUICIDE IN OLDER PERSONS: LEGAL AND POLICY IMPLICATIONS OF RESEARCH RESULTS

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Homicide-suicide rates are relatively low compared to suicide rates in the aged, but together these violent events are a public mental health challenge. Our research suggests that Florida and other states with large proportions of older persons and high suicide rates, may be experiencing an increasing rate of successful and unsuccessful homicide-suicides. When homicide-suicides are unsuccessful, the perpetrator faces criminal sanctions that vary significantly by state, and prosecutors and judges have a range of discretionary options. Although depression and other psychopathology play a central role multiple, interacting factors lead to homicide, including the active role of the male as perpetrator, poor health, social isolation, pain, multiple life stressors, availability of fire arms and alcohol, as well as conflict, anger, legal and financial problems. The heterogeneity in homicide-suicides indicates the importance of different treatment and prevention strategies. Guidelines are urgently needed for the consideration of mental health issues in the definition and application of criminal law statutes.

GENDER DIFFERENCES IN SUPPORT NETWORKS AMONG OLDER ADULT SCHIZOPHRENICS

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A considerable body of research suggests that social support impacts both physical and mental health. While prior research has shown older women to have larger numbers of support persons in their networks relative to older men, most of this research has been with non-clinical samples. Little is known about the potential gender differences in support among older adults with a chronic and disabling disorder such as schizophrenia. The present study examined 10 community-dwelling schizophrenics (M age=54.00 yrs., SD=6.06) on instruments assessing the structural and functional characteristics of their social support networks. Preliminary analysis is consistent with existing literature on non-clinical samples, in that females include a greater number of persons in their support networks (M difference=8.17) and report more support than males. Females are also more likely to include approximately 2 to 4 times more family members and friends than males, respectively. The findings highlight an important area for therapeutic intervention to maximize client success.

RELATIONSHIP BETWEEN ALCOHOL EXPECTANCIES AND CONSUMPTION: AGE AND SEX DIFFERENCES.

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Previous studies have demonstrated a correlation between expectancies (beliefs) that adolescents and young adults hold about the effects of alcohol and the amount of alcohol they consume. Such studies have not been conducted with older adults. This study examined age and sex differences in expectancies and alcohol consumption levels in a sample of 92 older and 83 younger adults. The two groups were administered a self-report questionnaire for quantity and frequency of alcohol consumption, and positive and negative expectancies regarding the effects of alcohol. Results found lower levels of alcohol consumption as well as lower levels of both positive and negative expectancies in the older sample. ANOVA results found that the difference between older and younger adults on expectancy levels was greater for negative expectancies than for positive ones. Among older women, there was a significant correlation between negative expectancies and lower alcohol consumption. For both older men and younger women, positive expectancies correlated with increased consumption. Correlations between expectancies and consumption for younger men were not significant. These results suggest that age and sex may differentially influence how expectancies affect drinking, a finding with implications for cognitive interventions. For older adults, this would suggest that women's drinking might be reducible by increasing negative beliefs about effects of alcohol. drinking of older men might be reducible if positive beliefs are decreased.

Marital History, Social Support, and Mental Health

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Marital status is strongly related to both social support and mental health; however, much of the research has employed a static view of marital status. As a result, it is not clear how marital history, the life course counterpart of marital status, may pattern social support and mental health. In this research the relationship between marital history, social support, and mental health is explored using a typological approach in the conceptualization of marital history that incorporates information about the number and sequence of marital transitions. Data are drawn from the 1982-83 Piedmont Health Survey, of the National Institute of Mental Health Epidemiologic Catchment Area Study, a survey of over 3,000 adults 18 years and older. Fourteen marital history groups are

compared on indicators of perceived social support, social integration, and three measures of mental health (diagnoses of major depression, substance abuse/dependence, and generalized anxiety disorder). Results indicate significant differences in rates of substance abuse/dependence between groups of the married with different marital histories and differences in rates of generalized anxiety among the widowed. Significant differences in perceived social support are found among groups of the married, divorced, and separated and differences in social integration among groups of the married. In general, findings suggest that fewer marital transitions are associated with better social support and mental health. Future, more dynamic, analyses will illuminate the process through which marital history affects social support which, in turn, influences mental health.

LEVELS OF KNOWLEDGE ABOUT SUICIDE FACTS AND MYTHS AMONG OLDER ADULTS. R.J. Law, D.L. Segal, J.N. Hook & A. Given, U of Colorado at Colo Springs, Colorado Springs, CO 80933.

Although older adults have the highest suicide rates of any age group, few studies have examined levels of knowledge about suicide facts in this group. The purpose of the present study was to investigate the prevalence of a number of misconceptions about suicide in younger (N = 116; range = 17-52; mean age = 26.2; 62% female) and older (N = 62; range = 55-79; mean age = 62.4; 58% female) adults and to assess for differences in levels of knowledge between younger and older persons. Volunteer participants anonymously completed a suicide knowledge quiz, with items derived from the Revised Facts on Suicide Quiz (Hubbard & McIntosh, 1992) and several abnormal psychology texts. Responses to the 47 items were analyzed for percentage of endorsement and differential endorsement as related to age. Using 70% correct as the criterion for adequate knowledge, results for the older adults indicated that level of knowledge was good for 16 items (34%) but poor for 31 items (66%). Younger adults showed good knowledge on 19 items (40%). Chi-square revealed that older adults had poorer knowledge on 5 items and better knowledge on 3 items compared to younger adults. Significant difference on total score did not exist among the two age groups. This research suggests that misconceptions about suicide are prevalent among older persons and their knowledge about some suicide facts may be poorer than younger persons. Education efforts aimed at decreasing myths about suicide may serve to heighten awareness of the problem and increase help-seeking behaviors in some older individuals.

MEANING, COPING AND LIFESTYLE PATTERNS OF OLDER ADULT AND YOUNGER WOMEN WITH BREAST CANCER K.A. Sternas, Georgetown Univ., School of Nursing, Washington, D.C. 20007, L. Talbott, D. Frager, E.Olympia, Holy Cross Hospital,Silver Spring, MD. D. Dillon, Kaplan, Rockville, MD.

Breast cancer, the most common cancer among women and the second leading cause of cancer death, is perceived as a stressful experience. Factors which can impact on the quality of life of women include meaning of having breast cancer, coping and lifestyle patterns.This study focused on comparing meaning, coping and lifestyle patterns of 40 older adult and younger women aged 30 to 80 years following breast cancer. Lazarus and Folkman's stress-appraisal-coping framework guided the study. A letter about the study was shared with potential subjects who were referred by their surgeons. Women completed the Appraisal of Breast Cancer Scale, Revised Ways of Coping, and Assessment of Resources which included lifestyle. Older women had more positive appraisals of having breast cancer than younger women. Breast cancer was appraised as a challenging experience with harmful losses. Women were challenged to maintain self-esteem, health and stay socially active. Concerns included:loss of independence; financial and social changes; grief and sleeping problems; husbands' needs for education and support.Women receiving chemotherapy had more negative appraisals. Helpful coping included positive reappraisal, planful problem-solving, prayer, and keeping busy. Breast cancer resulted in women taking more control over their life and making positive lifestyle changes including eating better, reducing caffeine and alcohol intake, quitting smoking, exercising and regular BSE. Implications include the need to identify women with negative appraisals since they have poor outcomes and to educate women about coping and lifestyle patterns which can improve quality of life.

SELF-REPORTED RELIGIOUS EXPERIENCES AND DELUSIONAL THINKING IN AN ELDERLY COMMUNITY SAMPLE

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The purpose of the present study is to examine the relationship between self-reported religious experiences and prevalence of delusional thinking in a community sample of older adults. Two samples were interviewed using the Schedule for Affective Disorders and Schizophrenia (SADS), the CES-D, and multiple indices of religious involvement. A random sample of 262 elders was selected older adults from the Worcester MA annual city census were interviewed (68% response rate), and a "snowball" sample of 80 African American elders (90% response rate) was developed. In the combined sample, approximately 5% showed evidence of delusional thinking (n=17) on the SADS. Of those who demonstrated evidence of delusional thinking, more than 70% (n=13) reported at least one intense religious experience, e.g., feeling punished by God, tempted by the devil, seeing God perform miracles etc. By contrast, of those who demonstrated no evidence of delusional thinking (n=311), approximately 30% reported religious experiences. Relationships were also noted between SADS ratings of suspiciousness, grandiosity, and moderate to severe depressed mood, and self-reported religious experience.

THE CAROLINA COMPANIONS PROJECT: INFORMAL SOCIAL SUPPORT FOR RURAL ELDERS WITH SEVERE MENTAL ILLNESS.

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Results from an 18-month demonstration project using retired community members as lay helpers to reduce social isolation and promote independent functioning among rural elders with long-term mental illnesses are presented. The project provided consumers with up to 10 hours per week one-to-one contact from a paid peer companion in addition to standard outpatient treatment. The study employed a quasi-experimental and mixed-methodology design to; (a) describe qualitatively the consumer-lay helper relationship and (b) evaluate consumer outcomes related to perceived social support at six-month intervals. Attachments between helper and consumer were characterized as either friendships or fictive kin relationships. Lay helpers demonstrated skill in adapting a variety of problem-solving, direct-assistance, and modeling techniques in support of consumers' changing physical and mental health status. Consumers' satisfaction with and perceptions of informal support received showed a non-significant trend toward improvement. Consumers reported more occurrences and increased satisfaction with opportunities to provide informal support to others over the course of the intervention.

SOCIAL SUPPORT AND EMOTIONAL STATUS IN OLDER MEDICAL REHABILITATION PATIENTS

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The relationship of cognitive functioning to social support and depression was investigated in 81 consecutive adults who were living alone prior to being hospitalized. Subjects were divided into cognitively intact (N=43) or impaired groupings (N=38) based on a cut score of 123 on the Mattis Dementia Rating Scale. Mean age for the sample was 74 years and mean education level was 11 years. The mean age of the cognitively intact group was significantly lower and mean education was significantly higher than the cognitively impaired group. The cognitively impaired group reported significantly less perceived emotional support (Multidimensional Scale of Perceived Social Support) and had significantly higher scores on the Geriatric Depression Scale. Thus, decreased perceived social support was associated with increased depressive symptoms. The groups did not differ on self-reported tangible support. These findings underscore the fact that cognitively impaired older adults, even though functioning well enough to live alone, are a population that perceives their social support from family and friends as inadequate and may be at risk of becoming isolated and depressed.

AN ECOLOGICAL PERSPECTIVE TO VERBOSITY IN OLDER WOMEN

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Verbosity (excessive and off target speech) has been found to relate to characteristics such as poor inhibition, extroversion, and age. Previous work as examined the stability and predictors of verbose speech, but no studies have examined how the level of verbosity affects performance on everyday tasks. The present study examined 47 non-cognitively impaired women ranging from 60-97 years of age. Based on a personal interview, the participants were placed into groups of low, medium, and high levels of verbosity. Participants then completed several common tasks that ranged in cognitive and contextual demand (map reading, describing lost pictures and how to bake something, and conversing with a friend). A series of MANOVAs revealed that performance was affected by verbosity level. High verbose participants had poorer performance on demanding tasks than the medium or low verbose groups. There were no group differences on the lowest demand task. The results suggest that verbosity was a relatively stable characteristic in everyday performance. The implications of this study imply that high demand real life situations (e.g., doctors' visits) will evoke poorer performance in verbose adults.

COMBAT EXPOSURE AND PTSD SYMPTOMS AMONG OLDER BRITISH VETERANS.

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Prior research on American combat veterans showed that perceiving desirable effects from military service mediated the relationship between combat exposure and PTSD symptoms in late life. Appraisals of desirable effects were associated with lower levels of PTSD symptoms, and undesirable effects with higher levels (Aldwin et al., 1994). We replicated and extended this study in a British sample of veterans (N= 90, M age = 79.25, SD=6.24, range = 68-92) by including health ratings from the SF-36. Unlike the prior study, combat exposure was negatively related to perceived benefits, perhaps because these veterans had more extensive combat exposure over longer periods of time. Nonetheless, path analysis showed that combat exposure in early life was significantly related to PTSD symptoms in late life, but appraisals did mediate this relationship in the expected directions, even covarying neuroticism to control for response bias. Combat exposure was also related to poorer health ratings; again, this effect was mediated by perceived desirable and undesirable effects in the expected directions. Clearly, combat exposure may have long-term effects on both mental and physical health in late life, but these effects may be mitigated by appraisal processes.

THE OLDEST-OLD: GERIATRIC PSYCHIATRY INPATIENTS

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The population age 85 and older is characterized by significant social and medical problems compared to those between 65 and 85. This study reviews comprehensive clinical data on 264 geriatric patients requiring psychiatric treatment at the inpatient level of care, collected over a one year period (10/94 - 9/95). Surprisingly, almost no significant differences exist between the clinical syndromes, comorbidities and relevant social parameters of patients 85 and over (15.9% of the sample) and younger geriatric patients. The two groups did not differ by gender, duration of their current illness, legal status, history of previous psychiatric hospitalizations, or length of inpatient stay. 57% of the old-old had a dementia diagnosis (versus an affective disorder), 55% were dependent in their ADLs, 56% had psychotic symptoms, and they had an average of 3 medical conditions. Here again, the oldest old do not differ significantly from their younger counterparts. The old-old were half as likely to be discharged home, and three times as likely to go to assisted living or to a medical hospital as the younger group. While physicians' improvement ratings are similar across the groups, the oldest old received significantly fewer psychiatric medications at discharge. Unlike general elderly populations, old-old psychiatric patients do not appear to differ markedly from their younger counterparts across multiple domains.

EFFECTS OF AGE, SEX, AND SELF-CONCEPT CLARITY ON ADULTS' DEFENSE MECHANISMS

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Previous studies have shown considerable age and sex differences in adults' use of defense mechanisms as measured by the Defense Mechanisms Inventory (DMI). In general, these studies have suggested that older adults use less impulsive and more reflective and mature defense mechanisms than younger adults (see Diehl et al., 1996). The present study examined age and sex differences in defense mechanisms in a sample of 158 adults (80 men, 78 women) ranging in age from 20 to 87 years. In addition, it was examined whether the use of defense mechanisms would vary dependent on adults' self-concept clarity (SCC). Analyses of variance showed significant main effects of age group for the defense mechanisms Turning Against Object (TAO), Turning Against Self (TAS), Reversal (REV), Projection (PRO), and Principalization (PRN). Significant main effects of sex were found for TAO and TAS, and significant main effects of SCC were found for REV and PRN. Post-hoc analyses showed that older adults' mean scores were significantly ($p < .05$) lower for TAO, TAS, and PRO compared to younger adults, and significantly higher for REV and PRN. Men had higher mean scores than women on TAO, whereas the opposite was the case for TAS. Adults scoring high on SCC had significantly higher scores on REV and PRN compared to adults with low or medium SCC. Findings from these analyses lend further support to the hypothesis that older adults are more likely to use cognitive-reflective defense mechanisms rather than impulsive strategies. Results also suggest that the use of more reflective defense mechanisms varies with the clarity of adults' self-concept.

NURSE PRACTITIONERS' PROVISION OF GERIATRIC MENTAL HEALTH: RESULTS OF A NATIONAL SURVEY.

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Nurse practitioners (NPs) are increasingly involved in the delivery of mental health care to depressed and suicidal geriatric patients. With a grant from the Retirement Research Foundation, a national probability sample of 595 Adult, Family, and Geriatric NPs from an American Academy of Nurse Practitioners database were surveyed. Over 60% (N=322) responded to a 20-item questionnaire. NPs used a variety of approaches in assessing, treating, and referring depressed and suicidal geriatric patients. Comon assessment approaches were interviewing patients (99%) and family members (82%), medical workups (84%) and formal scales or instruments (50%). Psychosocial interventions were used as often (80% of respondents) as medication (76%) to treat depression. Barriers to providing mental health care included: patients unwilling to seek help or not complying with treatment and NP's lack of training in geriatric mental health. Over half of the respondents (55%) reported that they assessed suicidal older patients for access to a firearm; a greater proportion (72%) assessed for intentional misuse of medication—a less common method of suicide among older adults. NPs are in a unique position to aid in the prevention of elderly suicide. Meeting the mental health needs of a rapidly growing older population will require greater emphasis on geriatric mental health in the education of NPs.

CASINO GAMBLING AMONG THE ELDERLY

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A significant number of senior citizens spend their leisure time in gambling casinos in this country. For some older adults eager for a stimulating social outlet, casino gambling can become a virulent and destructive addiction. While prevalence studies have examined the incidence of problem gambling in other age groups, little attention has been paid to the impact of casino gambling on the elderly. This study investigated the prevalence of casino gambling as a social activity for active senior citizens (aged 65+). Activity directors from residential and assisted-care facilities, as well as from senior and retirement centers completed mailed surveys of the social activities offered by their facilities. Results of the survey (with a return rate of 46%) found casino gambling the most highly frequented day-trip-type social activity for 3108 active senior citizens represented in the study. One third of these seniors frequented facility-sponsored trips to the casino at least once a month. In addition, the casinos themselves offered gaming day-trips to 54% of the facilities, which were accepted in 50% of the cases. These findings suggest the need for greater awareness of the impact casino gambling may have on senior citizens in this country.

EXPERIENCES OF OLDER MANITOBANS WITH THE 1997 RED RIVER FLOOD

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In the spring of 1997 the Red River valley in southern Manitoba experienced severe flooding. This disaster provided a unique opportunity to compare post-event information with pre-event data from the 1996 wave of the Aging in Manitoba (AIM) Longitudinal Study. This AIM sub-study, funded by Manitoba Health, constitutes a rare example of a natural experiment surrounding a natural disaster. Approximately 140 individuals aged 73 and over were re-interviewed in the spring of 1998 concerning their health and functional status, their levels of social support, and other experiences resulting from the Flood of the Century. Items in the follow-up study included the most relevant and identical questions from the 1996 study, and a qualitative, audio-taped description of the participant's positive and negative experiences during and since the flood. Health service utilization data from a year preceding the initial interview through the time of the followup is also used to assess changes. This information will assist with planning health and support services for older victims of future natural disasters. The authors hope that others with post-disaster data will contribute to the discussion of these research results.

Life Satisfaction in Centenarians

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Objective: More clinical and research attention should be given to factors which may permit the old old to remain resilient even when confronted with adversity, such as admission to a nursing home. The purpose of this pilot study was to assess areas of perceived wellbeing and stress among institutionalized centenarians.

Subject: All centenarians residing in a 538 urban sectarian long term care facility.

Method: Salamon & Conte's Life Satisfaction Scale (LSS) was administered by a one-to-one interview format. This tool was chosen because it correlates with a wide variety of other measures including depression, hardiness and social readjustment rating scales. The LSS examines eight categories which correlate in the literature to life satisfaction in older adults. Five items relate to each one of the eight variables for a maximum subscore total of 25 points. Lower scores signify areas of perceived stress while higher scores signify areas of perceived wellbeing.

Results: Eight of twelve centenarians were able to complete the full interview. Taking pleasure in daily activities and regarding life as meaningful were the two categories perceived as most dissatisfying amongst the majority of respondents. Their scores demonstrated perceived stress and were much lower than average established normative values for their age group. Positive self-concept, goodness of fit between desired and achieved goals, perceived health, financial security and satisfaction with number and quality of social contacts were not found to be areas of significant stress. Positive mood tone/optimism was strongly endorsed by all subjects.

Conclusion: Centenarians are increasing more rapidly than any other segment of the population. Aspects of life which promote wellbeing or stress in 100 year olds warrants further investigation. Our preliminary findings point to a need for individualizing care in nursing home residents, providing stimulating and creative options that promote meaning and purpose for living.

MEASUREMENT OF COPING IN OLDER ADULTS: THE LOUISVILLE COPING Q-SORT

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Although a great deal of research has been conducted involving the relationship of stress and coping, a relatively small portion has focused on the special concerns of older adults. Additionally, a standard measurement instrument designed specifically for use with older adults has not been established. This study was designed to provide empirical support for a new coping instrument designed for use with older adults. The items on the Louisville Coping Q-Sort (LCQ) were developed on older samples; a q-sort format was intended to improve ease of administration. For a sample of 88 community-dwelling adults at least 65 years of age the relative utility of the LCQ is compared to the Ways of Coping Questionnaire (WCC). Using multiple regression, after controlling for the effects of age and education, the LCQ is a better predictor of distress as measured by the Positive Symptom Total and Global Severity Index subscales of the Brief Symptom Inventory than the WCC. Preliminary results suggest this method may be a more efficient way to measure coping in older adults.

ANXIETY, DEPRESSION, AND HEALTH: A PRELIMINARY LONGITUDINAL ANALYSIS.

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Depression and anxiety have both been suggested to be detrimental to older people's health. We used structural equation modeling to examine the relationships among health, self-reported anxiety symptoms, and self-reported depression symptoms at baseline and health status three years later in a sample of Swedish twins drawn from the Swedish Adoption/Twin Study of Aging. Contrary to expectation, neither anxiety nor depression symptoms made a significant contribution over initial health status in predicting subsequent health. Depressive symptoms, but not anxiety symptoms, did make a significant contribution to initial health status. Thus, these data provide no support for independent effects of subjective anxiety or depression upon future health status, after controlling for initial health. However, they do indicate a cross-sectional relationship between depressive symptoms, but not anxiety symptoms, and health.

Study supported by NIA grants AG-04563 and AG-10175.

AT-RISK STUDENT/ELDER CONNECTIVENESS: EVALUATION OF "FIND-A-FRIEND."

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Latino/a students attending an alternative high school and at-risk elder residents living in a senior complex participated weekly in an experiential learning activity. Both groups lacked family support, were low income and held a social perception as noncontributors in the community. The "Find-a-Friend" project was an intergenerational strategy tc link these two at risk groups. A three stage study assessed the success of the project. In stage one, students participated in an age sensitivity workshop in which knowledge acquisition was assessed using a pre-test/post-test, modified Palmore's facts on

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aging quiz. Stage two and three included field observations of student-elder interactions and behaviors recorded on a behavioral checklist following the workshop intervention. The data from the modified facts on aging quiz demonstrated an increase in knowledge of and sensitivity to the elder participants on the part of the Latino/a students. The data from the field observations further demonstrated enhanced interaction patterns, student/elder bonding, elder role model behavior, enhanced attentiveness and alertness, improved attendance, mutual respect and relationship building among the student and elder participants. Study results include age sensitivity workshop analysis and a short video record of the field observations.

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ASSOCIATIONS AMONG OBJECTIVE EVERYDAY COGNITIVE COMPETENCE, SELF-REPORTED IADLS, CLINICAL ASSESSMENTS, AND HEALTH OUTCOMES.

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Assessing impairment in instrumental task domains is particularly salient to the identification of early cognitive decline in older adults. To date, the majority of conclusions regarding functioning have been based on self-report data. While the relationship of self-reported IADLs to various health and service use indicators has been well established, little is known about the association of such outcomes with more cognitive, performance based instruments. Further, it is unclear how self-report and performance based instruments may be related to clinical measures used to diagnose dementia. The present study (N=596) was conducted in collaboration with the Monongahela Valley Independent Elders Survey (MoVIES), a longitudinal investigation of everyday competence among rural, low SES, nondemented older adults. In this sample, hearing impairment, social service use, home supervision, physical disability, mobility, age, and education were associated with objective cognitive competence. Self-reported and objective IADL performance were moderately associated. Factors and risk scales representing verbal ability, memory, executive functioning, functional health, health services use, and health perceptions were created. Analyses examining salient predictors of objective versus subjective everyday competence suggested that verbal ability, memory, executive functioning, MMSE, functional health, age, and education best predicted objective cognitive status. Conversely, self-reported functioning was predicted by executive functioning, functional health, health services use, and health perceptions.

Development of Timed IADL Tasks as Outcomes in Visual and Cognitive Intervention Evaluations.

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Our goal was to develop performance tasks representative of instrumental activities of daily living (IADL) that are related to visual and cognitive function in older adults. Ultimately the goal is to use these tasks as outcome measures in clinical trials evaluating the effectiveness of visual and/or cognitive interventions. 342 older adults (M age = 70; range 55-85) recruited from eye clinics underwent both visual (acuity, contrast sensitivity) and cognitive (processing speed, global cognitive status) tests. IADL performance was evaluated by a battery of 17 tasks where time to complete the task was the dependent measure. A requirement of tasks selected was that rapid and efficient task performance would be considered an advantage in everyday life. Tasks included reading ingredients on cans of food and instructions on medicine bottles, threading a needle, finding a phone number in a directory, and locating items on a crowded shelf. Multiple regression analysis indicated that visual and cognitive function were each independently associated with timed IADLs, adjusting for age, educational level, depression, and general health. Visual and cognitive function accounted for up to 37% of the variance in the performance of specific IADLs. Timed IADL tasks show promise as outcome measures in studies evaluating the success of visual or cognitive interventions in the elderly. Furthermore, these tasks serve as the basis for the timed IADL measures in ACTIVE.

DETERMINANTS OF SELF REPRESENTATION IN YOUNGER-AGED AND OLDER ADULTS.

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As individuals, our sense of self defines who we are and how we interact with our environment. This study examined how ego development level, personality traits, fluid and crystallized intelligence, and depression contribute to self (how person describes self) and self-other (how person believes significant others would describe them) representations. Participants were 142 adults ranging in age from 22 to 90 years (M = 53.3, SD = 20.5). Results indicated that after controlling for potential confounds (e.g., intelligence), age, ego development level, and the personality trait dimension Openness to Experience significantly accounted for 23% of the variance in self representation. Age was the only significant predictor of self-other representation, accounting for 15% of the variance. Furthermore, in line with recent work by Labouvie-Vief and colleagues (1995), older adults (60+ years) possessed significantly less complex and differentiated representations of self than younger-aged adults (22-59 years), Fs (1, 130) = 6.58 and 7.31, ps < .01. Findings suggest that representations of self are important constructs deserving of closer examination. (BSS 2)

HOW DOES EGO RELATE TO PERSONALITY AND COPING IN YOUNGER-AGED AND OLDER ADULTS?

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Ego development reflects the way in which an individual perceives oneself in relation to the world and others, and has been linked to empathy, locus of control, moral reasoning and personal maturity. Prior research is less clear with respect to ego level and coping strategy use. We examined whether those adults with higher ego levels were more likely to employ both a greater number and more sophisticated coping strategies. Life stress was expected to moderate this effect. 141 adults ranging in age from 22 to 90 years (M=53.8) were assessed on Loevinger's Sentence Completion Test, the NEO-PI-R, the Ways of Coping Checklist and Stressful Life Events. After controlling for IQ, life stress alone predicted number of coping strategies used. For problem-, emotion-, and cognitive-focused coping types, neither age nor ego level significantly predicted type of coping. The big five personality factors and life stress combined accounted for sizeable portions of variance in explaining coping type (37%, 24%, and 22%, respectively). Findings highlight the importance of individual and contextual factors as determinants of amount and type of coping used. (BSS 2)

Older drivers in primary care: A prospective study of brief neuropsychological measures. SE Lesikar, JJ Gallo, GW Rebok, PM Keyl. Johns Hopkins University, 624 N. Broadway, Baltimore MD 21205.

Prior work suggested that tests of attention and memory were associated with reports of crash occurrence. Our goal was to investigate these relationships over time, in order to develop a test battery that could predict unsafe driving behavior. One hundred twelve drivers aged 65 and older (mean age = 72.0 SD =5.3) were administered a neuropsychological test battery. Information about driving habits in the previous two years was collected at time of initial testing and again at a two year follow-up. At follow-up, 73 subjects completed the driving habits interview (87% completion rate). Preliminary analyses suggest that tests of attention (Trail Making Test -part A) and visual information processing (Money Road Map and Motor Free Visual Perception Test) were associated with an increased risk of reporting motor vehicle crash at follow-up. For example, respondents with poor performance on the Trail Making Test -part A were almost 4 times more likely to report a crash at follow-up (age adjusted odds ratio = 3.91; p=0.08). A combined driving habits outcome variable that includes baseline self-reports of driving safety, near misses, changes in abilities or habits, and frustration when driving, was associated with an increased risk of reporting a crash at follow-up. These results suggest that brief cognitive tests and simple questions about driving habits can provide useful information which should be considered with other performance data when making predictions about crash risk. Further studies with larger sample size are necessary to elucidate these relationships and develop a clinically feasible driving assessment battery.

COGNITIVE AND MOBILITY INTERACTIONS IN OLDER INDIVIDUALS WITH AND WITHOUT MILD HEALTH COMPLAINTS.

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A group of 30, generally healthy, nondemented, community-dwelling, older volunteers (age: 64-85 yrs.; MMSE ≥ 24) were divided into two groups based on strength, pain, and activity measures: Active (n=16) and Frail (n=14). No group differences were found for age, anxiety, education, MMSE, visual learning, inattention, and psychomotor performance. Select group differences were noted on a series of cognitive and personality variables. The Active Group reported lower scores for Risk Taking and higher scores for depressed mood. The Frail Group demonstrated lower scores on measures of visual-spatial discrimination, fine motor control, conceptual problem solving, and response speed. During a sudden stops task, the Frail, as compared to Active, group demonstrated significantly slower Walking Speed and Time to Stop. Measures of cognitive flexibility, fine motor control, and mood significantly correlated with mobility task performance ($r = .45 - .72$). Cognitive and personality measures are related to health status indicators, even among reasonably healthy individuals. Performance on these same tasks also is significantly related to laboratory measures of motor speed and efficiency that have been linked to functional status and falls risk.

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VALIDITY OF THE NSRP TEST BATTERY WITH OLDER STROKE PATIENTS

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The Normative Studies Research Project (NSRP) test battery was the first battery specifically created for and validated on older urban medical patients (Lichtenberg et al., 1998). The current study seeks to extend investigation of the NSRP battery to the detection of vascular dementia. Thirty two cognitively intact individuals, as defined by independent functioning on scores of cognition and ADLs, were compared with 68 stroke patients with dementia, as defined by impairments in memory, one other area of cognition, and ADLs. The mean age of subjects was 77 years, with a mean education of 10 years, and 66% of the sample were women and 66% were African American. Cognitively intact subjects were significantly younger and better educated than the demented group. After controlling for demographic variables, logistic regression using four tests from the NSRP battery produced a sensitivity of 75%, a specificity of 87%, positive predictive power of 77% and negative predictive power of 86%. Results supported the use of the NSRP battery with patients with vascular dementia.

NARRATIVE MAIN-POINT INFERENCES ACROSS THE LIFE SPAN

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Adult developmental studies of narrative main-point inferences suggest that elderly individuals focus more on the pragmatic point of stories, while younger adults focus more on their literal content . This seems especially evident when responses are minimally constrained experimentally, although the phenomenon has been examined by only a handful of studies with a limited set of narrative exemplars presented acontextually. In this study, a cross-generational sample of 24 educationally homogeneous adults provided written encapsulations of the main point(s) for 16 different narratives. Selected cognitive-linguistic tests and an ethnographic questionnaire were also administered. Three factors thought to influence the nature of main-point inferences were varied: narrative type (fable or non-fable narrative), context of presentation (didactic or neutral), and reader goals (to moralize or briefly summarize). Correspondence analysis revealed a gradient of responses from narrative-like (literal) to hortatory. Older adults responded largely in a hortatory fashion, irrespective of experimental condition, while younger adults varied response types by condition. Results may reflect trans-generational cognitive changes, cohort effects, and/or variations in response to experimental situations.

MEDICAL CONDITIONS AND SELF-REPORTED HEALTH AS PREDICTORS OF COGNITIVE PERFORMANCE IN OLDER ADULTS

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We analyzed the effects of specific medical conditions and general health ratings on cognition in a sample of 2632 rural older adults who completed list recall and mental status tasks. Higher diastolic blood pressure predicted worse list recall scores, whereas self reported high blood pressure was not a predictor of cognitive performance. Consistent with previous findings, stroke was a negative predictor of both recall and mental status. Higher health ratings predicted better list recall performance, and depression predicted poorer performance on both recall and mental status tests. There was an interaction between diastolic blood pressure and lung disease, where those with both lung disease and high blood pressure scored better on recall than those with blood pressure in the normal range. This remained significant even when there was some control for severity of lung disease.

INDIVIDUAL DIFFERENCES IN WRITTEN LANGUAGE PRODUCTION ACROSS THE ADULT LIFESPAN

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A sample of participants from the 1994 testing of the Long Beach Longitudinal Study completed a range of cognitive tasks, including writing a brief autobiographical statement. Propositional density, a measure of linguistic ability, was assessed from these statements. Correlates of propositional density, including age, were examined. We analyzed 242 samples written by adults between 32 and 94 years old, 116 of whom were over the age of 70. Vocabulary was the only direct predictor of propositional density, accounting for the largest amount of variance in our model, which included socio-demographic and cognitive measures. However, age had a small negative effect on propositional density, transmitted indirectly via measures of fluid abilities and vocabulary measures. This finding complements recent evidence suggesting linguistic ability may serve as a marker of cognitive capacity or reserve.

FITNESS ACTIVITY AND PERCEPTIONS OF HEALTH AND MEMORY.

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Results from research investigating the relationship between fitness and cognitive function have been mixed. Exercise intervention studies, both those that find a positive relationship between these variables and those that do not report that participants perceive that their cognitive performance and health has improved. We examined the relationships between self-reported fitness activity and self-rated health and memory using data from the 1994 wave of the Long Beach Longitudinal Study, which included 576 participants aged 30-98. Independent of age, education, medical visits, and several health-related variables, greater fitness activity was associated wtih better ratings of health. Independent of education, scores on neuroticism, depression, and self-rated health, less fitness activity was associated with better ratings of memory. Health ratings may be more easily influenced by fitness activity of any kind while ratings of perceived memory are paradoxical and may relate to other factors.

APOLIPOPROTEIN E ALLELE COMBINATIONS, PLASMA LIPID PROFILES, AND COGNITIVE DECLINE IN A SAMPLE FROM THE SEATTLE LONGITUDINAL STUDY.

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A sample of older adults (N = 147; mean age = 65.2) participating at 2 timepoints in the SLS was tested for expression patterns of the ApoE allele and lipid profiles. Based on prior studies demonstrating a link between the ApoE ε4 allele and AD, and between the ε2 allele and cognitive stability , it was hypothesized that the ε4 allele would be associated with greater decline in primary mental abilities, and the ε2 allele would be associated with lesser decline. The ε2/2, 4/2, and 4/4 combinations were under represented in this sample, so it was not possible to adequately test the above hypotheses. However, the remaining allelic combinations (ε3/2, 3/3, and 4/3) were compared. While there was no direct relation between allelic expression and decline in any of the primary mental abilities (PMA's), the ε3/2 group had significantly lower levels of plasma cholesterol, which was in turn related to decline in inductive reasoning ability, but not as predicted: high cholesterol levels were associated with less decline. A series of regressions, performed by entering allele combinations first, followed by plasma lipid counts, followed by age, education, and gender revealed marginally significant roles for the ε4/3 allele combination (p = .07) in predicting decline and plasma cholesterol level (p = .10) as a factor influencing stability in inductive reasoning. Other PMA changes were affected only by education and age. Possibilities for further studies are discussed.

OPTIMAL AND SUBOPTIMAL PRIMING EFFECTS ON AFFECTIVE JUDGMENTS.

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An important characteristic of everyday functioning is the ability to control the impact of irrelevant information when making decisions. In order to attain control, one must first be aware of the irrelevant information and must control for its influence. We hypothesized that aging will have a negative impact on both types of skills, thereby making older adults more susceptible to potentially biasing influences of such information. To test this hypothesis, adults aged from 25 to 80 made likability judgments about Japanese Kanji characters. Just prior to presentation of these characters, a prime word with either positive, neutral, or negative affective characteristics was presented either optimally (with awareness) or suboptimally (without awareness). As expected, individuals of all ages made judgments biased toward the affective prime when it was presented suboptimally. In contrast, only older adults exhibits biases when the prime was presented at optimal, suggesting that aging is associated with a decline in controlled processing.

THE ROLE OF PROCESSING SPEED AND WORKING MEMORY ON HIGH AND LOW COGNITIVE DEMAND TASKS IN THE ELDERLY

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Many conflicting results exist regarding the role of processing speed (PS) and working memory (WM) in explaining age-related memory changes. Parks et al., (1996) attribute the discrepancy to differential effects of WM and PS on various constructs of memory. The current research is an extension of this concept and was conducted to assess the role of PS, WM, and age on two types of memory tasks, high and low demand. Processing speed was defined by the amount of time taken to study a list of information, working memory by total score on a mental arithmetic task. Memory was assessed with the 9-item California Verbal Learning Test. High demand tasks (HDT) included free recall measures: Total score for Trial 1, Trials1-5, and Long Delay Free recall. Low demand tasks (LDT) included cued recall measures: Long Delay Cued recall and a prospective memory task. It was hypothesized that LDT would be influenced by PS alone, while HDT would be mediated by PS *and* WM. Normal subjects (N=44) were divided into 3 groups: young-old; old-old; and oldest-old. As predicted, a significant age-effect for Trial1-5 of the HDT was eliminated by controlling for the influence of processing speed and working memory (p-level change: .035 to .20). PS and WM did not influence other HDT effects. While PS alone did not eliminate age-effects on LDT, we feel distinctions between types of memory tasks may be more subtle, reflecting learning, retention, and less effortful aspects of retrieval. These separate memory constructs will be discussed in terms of the differential effects of PS and WM.

GENDER DIFFERENCES IN SPATIAL ABILITY OF OLDER ADULTS: AN INVESTIGATION WITH UNLIKE-SEX TWIN PAIRS

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Research has suggested that men perform better on tests of spatial ability than women. The current study examined gender differences on two measures involving spatial ability in a study of 249 opposite-sex twin pairs aged 70 to 80 years. Similar patterns of gender differences should be expected on different measures of spatial ability. A male advantage, however, was found on figure rotation but not on block design. In addition, the correlation between block design and figure rotation for men was almost as high as between two trials of figure rotation. A much lower correlation between the two measures for women suggests reliance on different strategies, whereas men may use more similar strategies across both tasks. Environmental explanations for this discrepancy are explored, including lifelong experience with tasks requiring manual dexterity.

PREDICTING EVERYDAY FUNCTIONING AND PROBLEM SOLVING: THE UTILITY OF A NEW MEASURE OF EVERYDAY COGNITION

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Researchers have argued that traditional psychometric tests of intellectual ability may not be appropriate for assessing intelligence in older adults, since they may not capture the cognitive demands of elders' daily contexts. While studies have tried to assess "practical intelligence," few have examined the utility of such measures to predict functional outcomes. Consequently, this study examined the salience of a new battery of everyday cognition measures (the Everyday Cognition Battery; ECB) to predict: (1) older adults' perceived independence in performing Activities of Daily Living (Lawton & Brody, 1969), and (2) performance on an open-ended everyday problem solving task designed after the measures created by Denney and colleagues (1989). Participants for these analyses were 174 (male = 37, female = 139) community dwelling adults aged 60 to 92 (mean = 73), with an average of 13 years of education (range = 1-23 years). The sample also included a high proportion of African Americans ($N = 54$). Results indicated that the ECB accounted for a significant amount of the variance in everyday functioning (14%) and everyday problem solving (32%). Furthermore, the ECB contributed unique and significant predictive variance while explaining all of the variance in these outcomes related to basic abilities, age, education and income, and ethnicity. Discussion focused on the theoretical and practical implications of these predictions.

TESTING PERFORMANCE AND STRUCTURAL CHARACTERISTICS IN PROCESSING SPEED ACROSS AGE GROUP AND TIME

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Age-related declines in cognitive functioning may reflect a slower speed of executing cognitive operations. We examined underlying age-related differences, changes, and latent structure in 9 measures of perceptual, verbal, and comprehension processing speed, as well as reaction time. The sample consisted of 100 younger adults ($M_{age} = 23.17$; $M_{educ} = 15.18$), 294 young-old adults ($M_{age} = 62.43$; $M_{educ} = 15.10$), and 227 old-old adults ($M_{age} = 74.95$; $M_{educ} = 14.35$) who participated in the Victoria Longitudinal Study. Younger adults performed better than young-old and old-old adults on all processing speed measures. Two-wave longitudinal analyses on 239 young-old ($M_{age} = 66.19$; $M_{educ} = 15.40$) and 161 old-old ($M_{age} = 78.27$; $M_{educ} = 14.24$) adults indicated significant 3-year declines for 5 of the 9 measures. We examined factorial invariance across age and longitudinal invariance across 2 occasions. Issues of qualitative and quantitative stability are discussed.

The Relationship Among Self-Reported Sleep Measures, Fitness, and Cognitive Performance in 60-to-70 Year-Old Men and Women.

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Participation in aerobic exercise has been studied with regard to its impact on sleep and relationship to cognitive performance. Although aerobic fitness appears to benefit certain cognitive processes and enhance sleep, and sleep deprivation hinders cognitive function, little research has investigated the inter-action of exercise, sleep, and cognitive performance. The purpose of this study was to determine the relationship of aerobic fitness (VO_{2max}) and overall sleep quality to cognitive function (COG) in a sample of very healthy older adults (N=123). Aerobic fitness was assessed by a graded exercise stress test. Sleep measures (SLP), acquired via a 3-day sleep diary and questionnaire, include night sleep duration (NS), nap time, bed time, subjective sleep quality, sleep problems (SP), daytime sleepiness, and bed time consistency. Cognitive variables were factor-analyzed and determined to compose 3 domains : Neuropsychological Performance (DSS, PASAT, STROOP, Trail-making, and Crossing-Off), Information Processing Speed (SRT and CRT), and Motor Speed (Tapping). Demographics variables (DEM), including age, gender, education level (ED), and marital status were assessed. The best linear combination of VO_{2max}, SLP, and DEM was determined by stepwise multiple regression. Interaction terms (e.g. NS by VO_{2max} and SP by VO_{2max}) allowed the relationship between SLP, COG, and VO_{2max} to be entered into the analyses. Although both males and females were above age norms for both VO_{2max} and ED, gender differences were significant in these variables ($F=62.46$, $F=13.19$, $p \leq .005$). Various combinations of VO_{2max}, SLP, and ED predicted eleven of sixteen cognitive functions at an $R^2 > 0.20$. VO_{2max}, in combination with SLP, was the most prominent predictor of male COG. ED, in combination with SLP, was the most prominent predictor of female COG.

[*] Funding by St. David's Healthcare Foundation, Austin, TX 78705

COGNITION, DEPRESSION AND IADLS IN HOSPITALIZED LIVE ALONE ELDERLY

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MacNeill and Lichtenberg (1997) demonstrated the importance of cognition in determining return to independent living after hospitalization of older persons. In this new study, a cohort of 80 consecutively admitted live alone elderly persons were examined. Mean age of the sample was 74 years and mean educational level was 10.7 years. 68 percent of the sample were women and 74% were African American. Age, education, the Charlson Co-Morbid Medical Illness Index, the Mattis Dementia Rating Scale scores and the Geriatric Depression Scale scores were entered into a regression equation to evaluate prediction of self report IADL abilities (Lawton scale). The DRS and GDS were the only significant predictors. Overall, 20% of IADL variance was accounted for with the DRS, and 26% of variance was accounted for with inclusion of the GDS.

Relationship of cognitive skills losses to driving performance: is it age related?

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This paper reports on completed driver studies, researching effects of relative cognitive skills on driving performance. The 2nd project was used to validate outcomes of the earlier study, comparing results using younger drivers with that of older drivers, using the same methodology. It examines 1 determinant of driver safety; cognitive skills of older drivers. Results from both studies confirmed hypothesized relationships between selected cognitive skills and driving performance, first using 100 older drivers (mean age 69.4, from 65 to 84), then using 62 drivers, age 20 through 64 (mean age 41.5).

Subjects were all tested for cognitive abilities in 2 processing skills - spatial processing and selective attention (auditory and visual), followed by completion of a driving protocol on a closed driving course. It was revisedbetween studies to include added dual-processing tasks, testing performance relative to auditory attention cognitive skills.

The primary emphasis was based on the hypothesis that there would be a significant relationship between cognitive skills scores and performance of driving tasks.

Significant correlations ($p<.05$) were established between scores in tests for both skills tested. Results varied; some driving task variables correlating significantly with cognitive skills in both studies and some correlations found in 1 but not the other. Results did support the hypotheses; losses in certain cognitive skills are related to increasing potential for increasingly serious driving errors. Including age in the equation with cognitive skills confirms the study premise: a significant relationship exists between cognitive skills and ability to safely accomplish a variety of commonplace driving tasks, independent of age.

EVIDENCE FOR INDEPENDENT AGING EFFECTS ON PERCEPTUAL ACUITY, BALANCE, AND COGNITIVE CAPABILITIES: THE NORA STUDY

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Recent research based on cross-sectional studies of individuals varying in age has led some investigators to propose a "common-cause" hypothesis for age-related changes in perceptual acuity, balance, and cognitive performance. The purpose of the present study was to evaluate whether the common cause hypothesis of cross-domain associations was observed in three population-based 75-year-old cohort samples obtained in Denmark, Finland, and Sweden. Cohort samples provide a strong basis for testing this hypothesis since the expectation is that common age-related changes affecting each of these domains would have a demonstrable effect on the reordering of individual differences. In general, no consistent associations were found between laboratory measures of visual acuity, auditory acuity, balance, and measures from the domain of cognitive functioning. However, evidence for peripheral sensory effects on cognitive performance was provided by within-sensory domain associations (e.g., visual acuity and visual reaction time). We conclude that effects of aging on sensory processes, including balance and gait, and varieties of cognitive functioning are multidimensional and complex. The potential for spurious associations among age-related phenomena when analysis is based on cross-sectional age-heterogeneous samples will be discussed.

AGE AND VARIABLE PRACTICE EFFECTS: CONCEPT FORMATION, RETENTION AND TRANSFER

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This experiment had three intentions : investigation of the effect training variability has on concept learning, retention and transfer; investigation of the effect training manipulations have on older adult learning; a replication of Posner & Keele's (1968) theory of prototype abstraction. Participants were 26 older adults and 56 younger adults, who were asked to learn the symptoms of an imaginary disease by reviewing fictional patient health histories. They were assigned to one of two variability levels in training, which were defined by the range of typicality the symptoms had. Dependent measures were immediate training efficiency, then retention and transfer effectiveness two days later. ANOVA revealed no main effect of variability condition or age group for any of the dependent measures. There were indications that the correct symptoms had been abstracted which were then used to " diagnose " new "patients." Further analyses indicated distinct processes responsible for transfer and symptom identification which were affected differently by the variability manipulation.

COGNITIVE SCREENING FOR MEDICATION SELF-MANAGEMENT

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The Cognitive Screening for Medication Self-management (CSMS) (Spiers, 1996) is an assessment tool designed to sample behaviors related to learning a new medication regimen. The CSMS measures prospective memory, encoding of medication instructions, organizational skills, sensory acuity, dosage calculations, container opening and medication dose planning. The purpose of this study was to examine differences on these behaviors among healthy older adults and obtain preliminary normative data on the CSMS. Participants included 14 Young-Old (x age = 68.93), 12 Old-Old (x age = 82.00), and 13 Oldest-Old (x age = 89.77) adults. No significant differences were found among the groups on any demographic variables or MMSE (x =28.15). On the CSMS encoding task, the Young-Old group performed better than the two older groups on free recall of medication information [$F(2,35) = 8.95$, $p < .001$] but there were no differences on performance when provided with a memory probe indicating increased structure equates memory across groups. This interpretation is supported when compared to performance on a neuropsychologically validated memory task, the California Verbal Learning Test - Nine word version (CVLT-9). There were no age-related differences across other cognitive measures assessed by the CSMS. These findings serve as preliminary evidence that tasks measuring the cognitive components of medication learning are performed in a similar manner across age group of healthy older adults.

COGNITIVE DECLINE AND EDUCATION IN A SAMPLE OF LONG-TERM CARE FACILITY RESIDENTS. S.A. Morris. R.N. Jones. J.N. Morris. Research and Training Institute, Hebrew Rehab Ctr for Aged, 1200 Centre St., Boston, MA 02131.

This paper examines the relationship between cognitive decline and education for residents of a long-term care facility in Boston, MA. Level of cognitive functioning was assessed with the MDS Cognitive Performance Scale (MDS-CPS) by nursing staff trained in use of the MDS by authors of the system. Assessments at baseline and followup (on average, 22 months later) were available for 775 residents -- mean age 87, 75% female. Thirty-nine percent (39%) had a diagnosis of Alzheimer's or other neurological deficit at baseline.

At baseline, no relationship between education and CPS score was found for subjects with and without neurological deficit. For residents with a neurological deficit at baseline, higher education was associated with lower rates of decline. There was no relationship between education and cognitive decline for those without a neurological diagnosis at baseline. The absence of a cross-sectional association of education and cognition may suggest that clinical ratings of cognitive level are not subject to educational biases, as has been suggested of psychometric tests. The positive association of education and cognitive decline among those with a neurological deficit provides support to brain reserve theories of the association of education and cognitive decline.

THE SPEED HYPOTHESIS OF COGNITIVE AGING CHECKED AT THE INDIVIDUAL LEVEL

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According to the "speed"-hypothesis of cognitive development the slowing of information processing is at the core of decreasing psychometric intelligence in the elderly. The purpose of the present study was to test the "speed"-hypothesis for fluid intelligence at the individual level using Latent Growth Curve Methodology. Data on 4 measurement points over 8 years come from the Bonn Longitudinal Study of Aging (N= 127, mean age 67.2, 53 % women). Based on principal factor analysis, markers of mental speed were the WAIS Digit Symbol Test and a simple psychomotor task. As indicators of fluid intelligence the WAIS Block Design and Object Assembly were used. After seperately fitting Latent Growth Curve Models for the trajectory of mental speed and fluid intelligence, a combined model showed no statistically significant improvement of fit after freeing the covariance between the slope factor of mental speed and fluid intelligence. Contrary to the "speed"-hypothesis, in our sample the intraindividual change of fluid intelligence within 8 years of development bears no systematic relation to the according intraindividual change of mental speed.

PLANNING VERSUS PERSISTING: THE RELATIONSHIP OF STRATEGY USAGE AND ENDURANCE IN A COGNITIVE TASK WITH SELF-EFFICACY AND COGNITIVE IMPAIRMENT

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Self-efficacy beliefs are thought to act – among others – through persistence/endurance and task choice/strategy usage. In this study, the following research questions were pursued: (1) How are strategy usage and endurance indicators of a cognitive task related to intellectual self-efficacy? (2) How do those variables perform in the differentiation of cognitive impairment?

These questions were investigated in a sample of 60 institutionalized elderly (age 81.15 years, 8.57 school years, Mini Mental-State – MMSE – score 21, SD=5.4). A 33-item test probing for figural relations ability was administered. The difference of total correct and guess-corrected (DTG) scores and the difference of attempted to total correct (ATC) items served as proxy measures for strategy usage. Endurance was operationalized as the total number of attempted items.

Chance-corrected series of 2 (intellectual self-efficacy) x 2 (MMSE) analyses of variance revealed main effects for MMSE on DTG and ATC, and a main effect for intellectual self-efficacy on ATC. With intellectual self-efficacy as the criterion in hierarchical multiple regressions, only ATC was a significant predictor, explaining 8% of the variance.

Concludingly the research questions can be answered as follows: (1) Only one strategy-usage variable (difference solved vs. attempted) is related to self-efficacy. (2) MMSE can also be predicted by both strategy usage indicators, suggesting that cognitively impaired elderly persist just as much as the unimpaired, but seldom resort to efficient problem-solving strategies.

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A QUALITATIVE STUDY OF DEPRESSION AND MARITAL QUALITY IN MATURE MARRIAGES. J.G. Sandberg, R.M. Miller, L.E. Bloomquist, J.M. Harper, C. S. Wilken. Kansas State University, Manhattan, KS, 66506.

Depression in later life has been related to numerous physical, psychological, and emotional problems which have a strong impact on overall life quality. The cost of depression, in terms of both human suffering and health care dollars, has merited a great deal of research. Despite this, very little has been written regarding the role of relationship factors in the onset and maintenance of depression in later life. In order to better understand how marital process is related to depression, 10 depressed and 16 non-depressed (mean age husbands=64; wives=62) couples were interviewed to compare and contrast their stories. While utilizing a grounded theory approach to qualitative methodology, several key themes emerged. First, many couples related their depression to major life events such as retirement and health problems. Second, the data suggests that marital interaction before, during, and after these critical life events impacted levels of mental health. Third, depressed couples reported difficulty in expressing emotion and solving problems with the depressed spouse feeling isolated and misunderstood and the non-depressed spouse feeling confused and frustrated. Fourth, resiliency or hardiness was listed as the primary coping mechanism. The findings suggest that a complete assessment of both partners and a maritally focused treatment of couples struggling with depression would add a vital component to existing treatment modalities. Also, the results encourage a new emphasis on relational dynamics in depression research and treatment in later life.

COMPARISON BETWEEN SELF-REPORT AND INTERVIEW ASSESSMENTS OF ANXIETY, DEPRESSION, AND COGNITIVE IMPAIRMENT IN OLDER ADULTS

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Accurate assessment of psychiatric symptoms in older adults is necessary for appropriate intervention planning. However, it is likely that different strategies to assess psychiatric and cognitive symptoms may result in divergent findings. Purpose of study was to investigate concordance between self-reported and interviewer evaluated symptoms of depression, anxiety, and cognitive impairment in older adults. Community-dwelling older volunteers (mean age = 67; range = 52-86; 75% female; 89% White) completed 2 self report measures: Brief Symptom Inventory, which has 9 clinical scales; and the Coolidge Axis Two Inventory, which has anxiety, depression, and several cognitive dysfunction scales. They were also evaluated by the panic disorder, generalized anxiety, and major depression modules of the Structured Clinical Interview for DSM-IV and the clinician administered Dementia Rating Scale. Data were submitted for correlational analyses. Results for self-report measures (CATI and BSI) showed poor agreement for anxiety ($r=.18$) and moderate agreement for depression ($r=.60$, $p<.003$). Agreement was uniformly poor between self-reports and the SCID, except for moderate agreement between CATI and SCID for depression ($r=.41$, $p<.02$). Agreement between CATI cognitive dysfunction and DRS scales were typically poor with the exception of the memory scales ($r=-.40$, $p<.02$). Results suggest that self-report and interview evaluations of common psychiatric symptoms and cognitive impairment are not equivalent, questioning validity of these self-report measures in older persons. Results highlight the need for clinicians to follow-up self-report measures with interviews to more accurately identify psychological symptoms.

HEALTH AND ANXIETY IN LATER LIFE.

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Anxious feelings are common in late life, and 10-20% of those over 65 experience clinically significant symptoms. However, these symptoms are often mislabeled as health problems or depression, and when left untreated may be precursors of anxiety disorders. This study was designed to examine the relationship of health, health perceptions, health locus of control (HLC), to hypochondriasis, perceived stress, anxiety sensitivity, and ways of coping in a sample of older adults ($N = 96$; $M = 72.8$, $SD = 6.9$). Preliminary results show that health (especially degree of pain) is significantly correlated with hypochondriasis, anxiety sensitivity, and stress. Older adults higher in hypochondriasis, anxiety sensitivity, and stress are more likely to attribute control over health to external sources (i.e., powerful others and chance) and more likely to use emotional regulation, denial and disengagement to cope with their health problems. Results from a series of hierarchical regression analyses show that hypochondriasis was the most significant predictor of powerful others-HLC, whereas anxiety sensitivity significantly predicted chance-HLC. Anxiety sensitivity was significantly predictive of coping through emotional regulation, emotional and behavioral disengagement, and denial. Findings have important implications for psychological adjustment in later life.

MAJOR AND MINOR DEPRESSION IN ELDERLY PATIENTS NEWLY RECEIVING VISITING NURSE CARE

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Homecare nursing is a rapidly growing segment of the health care system and used among medically-ill older adults with physical disabilities both as a source of long-term care and during recovery periods post-hospitalization. Homecare is often requested because these services allow patients to remain in their own home. Although depression is reported as both highly prevalent and a contributor to poor functional outcomes in other medically ill and/or disabled populations, the role of depression in homecare patients has received little attention. This study reports preliminary findings from a prospective study on the prevalence and outcomes of DSM-IV depression in a random sample of patients (age ≥ 65) newly receiving care from a large Visiting Nurse agency. Depression is assessed by interviews of both patients and their informants using the Structured Clinical Interview for DSM-IV Diagnoses (SCID). These interviews as well as medical illness information are reviewed by a psychiatrist and geriatrician to generate a "best estimate" diagnosis. Among our first set of interviews ($N=49$; mean age = 77.4, sd=7.23; 63.3% female), the prevalence of DSM-IV major depression was 20.4% and minor depression was 14.3%. Another 18.4% of patient reported depressive symptomatology that did not meet DSM-IV duration criteria. The presentation will report rates and correlates of depression in an enlarged sample (projected $N=150$) and discuss the implications for nursing care and patient outcomes.

COPING AND DEPRESSIVE SYMPTOMS IN MEDICALLY ILL ELDERLY INPATIENTS

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The use of specific coping strategies has been related to depression in a variety of populations, but relatively few studies have examined these relationships in medically ill hospitalized older adults. The use of religious coping strategies has been negatively associated with depressive symptoms in medically ill hospitalized veterans (Koenig et al., 1992, 1995), whereas emotion-focused coping has been positively associated with depression in colostomy patients (Keyes, 1987). Problem-focused coping has been negatively associated with depression in other populations, but has not been examined in hospitalized older adults.

The purpose of this pilot study was to examine the relationships between depressive symptoms and three coping strategies: emotion-focused, problem-focused, and religious coping. Male veterans ($N=27$), age 65 and older, who were hospitalized on general medicine wards were administered the Geriatric Depression Scale (Yesavage et al., 1983) and the *COPE* Inventory (Carver, Scheier, & Weintraub, 1989). Emotion-focused coping was positively associated with the number of depressive symptoms. Neither problem-focused coping nor religious coping was significantly related to depressive symptoms. Since coping styles are modifiable, hospitalized male veterans who use emotion-focused coping may benefit from education regarding more effective coping styles in order to reduce depressive symptoms.

LATE-LIFE DEPRESSION: A NATURALISTIC STUDY OF INPATIENT TREATMENT

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The clinical and demographic characteristics, length of stay, treatment and response of elderly patients with depression requiring hospital treatment on a specialized geropsychiatry unit were examined over a one year period (10/94 - 9/95). Out of 264 patients, 51.1% had a depressive disorder. Diagnoses included major depressive disorder (112 patients) and bipolar disorder (23 patients). 49.6% of patients had a late onset depression (after age 60) versus 34.8% who experienced a recurrence of an earlier onset depression (15.6% had an unknown age of onset). Depressed elderly patients were on average age 75.8, ranging from 51-94. They had high rates of psychotic features (48.1%), and medical comorbidity (99.2%). 40.0% had suicidal ideation and 11.9% more had made a suicide attempt prior to hospitalization. Treatments included Tricyclic antidepressants, SSRIs, and newer agents such as bupropion, venlafaxine, and nefazodone. 14.8% of patients were treated with ECT. Despite the severity of illness and advanced age, inpatient treatment of depression is effective for this patient population. 11.5% were described at discharge as slightly improved, 47.3% as moderately improved and 32.8% as much improved. Predictors of treatment response are presented.

THE EFFECT OF MAJOR DEPRESSION ON FUNCTIONAL STATUS IN PATIENTS WITH CORONARY ARTERY DISEASE

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We sought to examine the effect of major depression on reported functional status in a group of patients with coronary artery disease (CAD). Three hundred thirty-five medical inpatients with CAD who were free of dementia, Parkinson's disease and other primary neurological illnesses were administered the Duke Depression Evaluation Schedule, a structured psychiatric interview which included the Diagnostic Interview Schedule depression subscale, the Cumulative Illness Rating Scale, and two scales for measuring instrumental and self-maintenance activities of daily living. Twenty-seven subjects met DSM-IV criteria for major depression. Compared to subjects without major depression, depressed subjects were more than twice as likely to report a self-maintenance ADL deficit and were significantly more likely to report an IADL deficit than non-depressed subjects (93 vs 71%). In regression models, female gender, older age, greater medical illness severity and presence of major depression were significant predictors of self-maintenance ADL disability, and female gender, younger age, lower medical severity, and presence of major depression significantly predicted greater IADL impairment. Presence of major depression increases functional disability in patients with CAD. Antidepressant treatment may have a significant impact on both affective symptoms and functional status in CAD patients.

UNRECOGNIZED COMORBID DEPRESSION IN THE NMES

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Past research suggests that medical staff are not effective at diagnosing depression in older adults. The present research explores the relationship between a diagnosis of depression cited in the medical record (MR) of nursing home residents with that based on DSM-III-R criteria for depression. Data from the National Medical Expenditure Survey (NMES) pertaining to nursing home residents aged 65 and older (n=2,923) were used in analyses. Residents were placed in one of four categories based on their depression status. Results show that the frequency of depression as noted in the MR is 11.7%, while the frequency based on DSM-III-R criteria is 10.9%. However, agreement between the MR and the DSM-III-R criteria was found for only 2.8% of cases. Discriminant analysis was used to explore whether there were particular behavioral symptoms that might discriminate between those individuals with a MR diagnosis of depression and those who meet DSM-III-R criteria. The results of the discriminant analysis were significant at $p<.0001$ (Wilks-Lambda=.46).

EXPLORATORY FACTOR ANALYSIS OF THE CES-D IN AN ELDERLY COMMUNITY DWELLING SAMPLE

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This study reports results of an exploratory factor analysis of Centers for Epidemiologic Studies-Depression (CES-D) scale responses obtained from a cohort of community dwelling elders screened for participation in the ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) cognitive intervention trial. Subjects (N=318) were aged 65 to 92 (mean age 75) and predominantly female (n=270). Responses to twenty CES-D items were dichotomized indicating symptom presence in the previous week. The resulting tetrachoric correlation matrix was submitted to an exploratory factor analysis. Application of the K1 rule lead to a four factor solution. The first factor accounted for 46% of the variance and had high loadings on items assessing feeling "sad", "lonely", "fearful", "depressed" or "I had crying spells". The second factor had high loadings on only the positively worded items and accounted for 8% of the variance. The third factor had high loadings on items "I could not 'get going'" and "my sleep was restless" and accounted for 6% of the variance. The fourth factor had high loadings on items "I did not feel like eating", "I talked less", "everything I did was an effort", "I was bothered by things that don't usually" and "I could not shake off the blues." The first two factors map well on to previously described CES-D factors, *depressed affect* and *positive affect*. The third and fourth factor represent aspects of what have previously been reported as a *somatic and retarded activity*. The factor solution is discussed in relation to previous analyses, sample issues, assumptions involved with using dichotomous item factor analysis with tetrachorics relative to the assumptions of traditional analyses.

UTILITY OF THE PRIME-MD FOR DETECTING MENTAL DISORDERS BY HOME CARE NURSES. M. Préville, C. Leduc, G. Côté, R. Hébert, R. Boyer and D. Beaudry. University of Sherbrooke, Sherbrooke Geriatric University Institute, Canada (Québec) J1H 4C4.

Several studies have reported that depressive and anxious disorders were masked and undiagnosed among older adults, particularly among frail elderly. This phenomenon could have a significant impact on the elderly's quality of life. Mental health problems were associated with an increased risk of admission in nursing homes, and with a high risk of mortality.

The PRIME-MD (Primary Care Evaluation of Mental Disorders) has been proposed by Spitzer et al. (1994) to help physicians in primary care clinics. In this study, we assessed the utility of the PRIME-MD when used by home care nurses to detect mental health disorders among frail elderly receiving home services. Results obtained by nurses using the PRIME-MD were compared to results obtained by clinical psychologists using a structured diagnostic interview (SCID for DSM-IV). The study was conducted in two community health service centers (CLSC). All the patients in the health care workers' active case load were recruited on a voluntary basis in both CLSC. First, subjects were visited by a CLSC home care nurse, and invited to respond to the PRIME-MD. Thereafter, subjects were asked to participate in an at-home SCID interview with a clinical psychologist. The clinician was not informed of the PRIME-MD results. Results showed that 40% [34.3%–45.7%] of the respondents had a current SCID-IV diagnosis. The specificity of the test performed by nurses was 88.9% and its sensitivity was 56.7%. The correct classification rate was 76%. The gain in certainty ratio was 1.93 indicating that having a PRIME-MD positive result increased by 93% the certainty of a correct SCID–IV diagnosis. These results lead us to the conclusion that the PRIME-MD could be a useful tool for home care nurses and could help to identify undiagnosed frail older adults living at home with a mental health problem.

THE PREDICTORS OF DEPRESSION AMONG ELDERLY KOREAN-AMERICANS IN LOS ANGELES COUNTY Hee Yun Department of Social Welfare, UCLA, Los Angeles, CA 90034

In comparison with the overall older population, ethnic minority elderly persons have been unfocused by the mental health researches. Many elders from other countries still have a strong sense of ethnic identity and therefore have different worldview and lifestyle that may have an impact on their adjustment to older age as well as on their ability to cope with chronic life stresses. Sociodemographic characteristics such as income, health status, gender, age, education, religion, length of residency in the U.S., the degree of acculturation, and social support have been shown to affect depression among ethnic minority elderly population. The purpose of this study is to examine the predictors of depression among 95 elderly Korean immigrants who are 60 years old or over in Los Angeles County. The instrument used in this study is the Center for Epidemiologic Studies Depression (CES-D) scale. Results showed that the rate of depression was astonishingly high among elderly Korean immigrants. The main predictors that are significantly related to depression among elderly Korean immigrants were health status, importance of religion, family relationship, and education. That is, those who had higher health status, more education, placing importance on religion, and close relationship with adult children were less likely to report depression. However, social support and acculturation measures failed to show an association with depression among elderly Korean immigrants. Based on these findings, implication for social policy and practice will be discussed.

AGE, PHYSICAL IMPAIRMENT, AND SYMPTOMS OF ANXIETY: HEALTH CARE EFFICACY, PERSONAL, AND SOCIAL RESOURCES AS INTERVENING INFLUENCES
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This study examines patterns of symptoms of anxiety associated with age and physical impairment. Analyses are based on a representative sample of 967 physically disabled adults (ages 20 to 90) from ten counties of southwestern Ontario, Canada. Several hypotheses are tested regarding the intervening role of disability characteristics, perceived health care efficacy, personal attributes, and social stratification resources. As expected, results show a direct, positive association between symptoms of anxiety and physical impairment. That association, however, is curvilinear such that anxiety rises in early adulthood, peaking around age 50. At older ages, the level of anxiety declines dramatically. Analyses using OLS regression includes sets of intervening variables entered sequentially and reveals a significant reduction in the effect of impairment on symptoms of anxiety. Additionally, impairment and mastery interact such that higher mastery buffers the harmful effects of higher impairment. Other findings document the benefit of health care efficacy for reduced anxiety and its indirect effect through the sense of mastery.

This study was supported by the National Health Research and Development Program (NHRDP) of Health and Welfare Canada through a research grant and a National Health Scientist Award to R. Jay Turner.

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The Quality of Age Reporting Among White Americans Aged 85 and Above: Results of a Record Linkage Study

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Demographers have questioned the reliability of mortality estimates for the oldest old population. This study examines the consistency of age reporting on death certificates and Social Security Administration records for the oldest old U.S. whites. The analyses indicate substantial consistency in age reporting in the two sources with about 92% of the matched records in agreement. Among inconsistently reported cases, there was no clear tendency for the death certificate age to be younger or older than the Social Security age. Records from southern states tended to be less consistently reported than those from northern areas included in the study. Analyses of covariates indicate that birth record availability and above-average educational attainment are associated with age agreement. Special attention is given to quality of age reporting among purported centenarians.

Prospective Validity Study of the MacNeill Lichtenberg Decision Tree

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A new hospital-based case triaging method for geropsycholgical assessment was presented (MacNeill & Lichtenberg, 1997) based on retrospective analyses. In this study the decision tree method was used on 39 consecutive referals studied prospectively. Eighty two percent of the sample was African American, 64% were women, with a mean age of 77 years, a mean educational level of 9 years, and 41% lived alone. Of the 14 patients who passed the cognitive screen only 1 had evidence of dementia (93% Negative predictive power). Of the 25 patients who failed the cognitive screening measures, 24 scored in the impaired range (96% positive predictive power). Of the 19 patients who endorsed no symptoms on 3 specific items of the Geriatric Depression Scale none were depressed. Forty four percent of patients did not need further followup after the decision tree was used.

RELATION BETWEEN THE AFABS AND MEASURES OF EXECUTIVE AND COGNITIVE FUNCTIONING

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The Adult Functional Adaptive Behavior Scale (AFABS; Pierce, 1989) is a relatively new and relatively unresearched measure of adaptive functioning. A previous study has demonstrated that this brief scale, in combination with other measures, is useful for determining an individual's level of assistance required for personal care. Measures of executive and cognitive functioning provide information on cognitive deficits that may influence functional abilities and level of care required. This study further examined the internal consistency of the AFABS with a psychogeriatric population, and examined the relations between the AFABS, the Mini Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975) and the Executive Interview (EXIT; Royall, Mahurin,& Gray, 1992), a measure of executive functioning. The AFABS items exhibited high internal consistency and moderate to high correlations (p<.01) with the MMSE and EXIT. The implications for these relations will be discussed with regard to the assessment of functional abilities and the needed level of care.

THE MULTIDIMENSIONAL NATURE OF SENSE OF COHERENCE AMONG THE OLD-OLD

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Antonovsky's Sense of Coherence Scale (SOC) is a widely used index of resistance resources to stress in late life. Most investigators, including Antonovsky, have assumed unidmensionality of this scale. Based on a sample of 684 community-living old-old residing in a Sunbelt retirement community, the current study explores the dimensionality of the 13-item abbreviated SOC scale.

Using exploratory and confirmatory factor analyses, there is clear evidence of three distinct factors. The content of these factors suggests that they represent self-concepts of goal directedness, competence, and connectedness to others. Further support of the multidimensional nature of the SOC scale is provided by the distinct pattern of correlates with external variables. Each of the three dimensions show a different pattern relative to each other, in their correlations with measures of psychological well-being, extraverted and neurotic personality, and physical health.

PSYCHOMETRIC PROPERTIES OF THE REVISED OBSERVED TASKS OF DAILY LIVING (OTDL-R)

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The purpose of this study was to examine the psychometric properties of the revised Observed Tasks of Daily Living (OTDL-R), a performance-based measure of older adults' functioning in the domains of Taking Medications (TM), Telephone Use (TU), and Financial Management (FM). The study sample consisted of 170 community-residing older adults (M age = 74.2 years; range = 65-89 years; 29 men, 141 women; 67 white, 103 non-white) who participate in a study focusing on the effects of Advanced Cognitive Training In Vital Elders (ACTIVE). Analyses examining the item-difficulties of the individual tasks showed that the items cover all difficulty levels from easy (.88) to difficult (.22), with a mean item difficulty of .59. Cronbach's αs ranged from .53 for FM to .70 for TM, with α = .80 for the total scale. The factor structure of the OTDL-R was examined via LISREL 8. Findings showed that a 3-factor model fit the data significantly better (GFI = .87, $\Delta x^2(3) = 16.37$, $p < .001$) than a single-factor model. Analyses examining the same loading pattern across the two major ethnic groups (i.e., whites vs. non-whites) provided additional support for a 3-factor model (GFI = .95). Analyses showed significant correlations of the total score with measures of basic cognitive functioning (e.g., vocabulary, memory, reasoning, speed of processing; r's ranged from .22 to .53), a measure of everyday cognitive functioning (r = .68), corresponding scales on the MDS IADL measure (r's ranged from -.21 to -.25), and a measure of general health (SF-36 General Health, r = .30).

METHODOLOGICAL ISSUES IN THE INVESTIGATION OF EMOTIONAL RESPONSES IN OLD AGE

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During the last 20 years psychological research showed a major interest for cognitive abilities modifications but this lead to an impoverishment of the studies concerning emotional aspects of aged people. While investigating human emotions, researchers are confronted with the challenge of how to elicit emotional responses in laboratories. Such a task raises many theoretical and methodological questions. Film exposure seems to be a potentially successful technique for inducting emotions since it can induce a large array of emotions using well known materials, equally familiar to subjects at different age. Within this context, we investigated the relationship between emotion responses and ageing using film segments. Results showed that different segments can elicit a range of predictable emotions: joy, sadness, anger, fear, surprise, disgust. Multivariate analysis revealed that aged people answers were structured by some factors corresponding to the three emotional dimensions. The first factor is structured on the polarity pleasure/unpleasure, the second on the activation (high or low), the third on the potency (ability/inability of acting). Our study demonstrated that ageing, apart from a progressive reduction of sensorial and motory activities, does not impede the preservation of successfull emotional responses, both in terms of quality and of quantity. Elderly people give an example of adaptation and overcoming of biological limits. The results obtained with our set of twelve film segments indicate this material as a powerful and ecologically relevant tool to elicit discrete emotions, to contrast young and elderly people as well as to study the effects of gender and of neurological damage on emotional responses.

A BEHAVIOR SCALE DETERMINATION OF REASONS FOR ADMISSION TO A GEROPSYCHIATRIC HOSPITAL

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Rey et al. (1992) indicated that the Nursing Home Behavior Problem Scale (NHPBS) is a valid and reliable measure of serious behavior problems in nursing home patients. Clinical experience indicates that a common reason for geropsychiatric hospitalization are serious behavior problems. We examined the ability of the NHBPS to catalog reasons for geropsychiatric hospital admission (N = 728) over a 5-yr period. Results indicated that the most frequent NHPBS category of reason for admission was Uncooperative/Aggressive Behavior. 81.9% of the patients exhibited at least one behavior in this category. In contrast, the least frequent NHPBS category was Annoying Behavior (e.g., complaining or whining) -- only 3.6% of patients exhibited at least one behavior in this category. Of the 29 NHBPS items, 14 behavior items were rarely exhibited by patients (<5% of admissions). These results will be discussed in terms of using NHPBS behavior items as initial target treatment focus.

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RECRUITING OLDER AFRICAN AMERICAN MEN TO THE PROSTATE, LUNG, COLORECTAL, AND OVARIAN (PLCO) CANCER SCREENING TRIAL (THE AAMEN PROJECT): OVERVIEW OF STUDY DESIGN.

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The broad, long-term objective of this study is to identify a method for increasing the recruitment and retention of older African American men in cancer screening trials. The study, underway for the past 1.5 years, involves African American men aged 55-74 in the Detroit metropolitan area. The specific aims are to evaluate the efficacy of three increasingly intensive recruitment interventions in recruiting and retaining African American men in the PLCO trial. Intervention A consists of an enhanced recruitment letter, a telephone eligibility interview by trained African American interviewers, and a mailed baseline/consent packet. Intervention B consists of the enhanced recruitment letter, and the telephone interview, during which baseline information is gathered, followed by a mailed consent packet. Intervention C includes the enhanced recruitment letter, the telephone eligibility interview, and a church-based project session, during which baseline information is gathered. The control recruitment intervention consists of standard PLCO recruitment procedures: an introductory mailing, the telephone eligibility interview, and a mailed baseline information packet. The research design is a randomized, controlled trial. Socioeconomic status is assigned at the time of randomization to one of the three recruitment interventions or to the control intervention, and will be used as a covariate in later analyses.

COMMUNICATION CHANNEL EFFICACY IN RECRUITMENT OF OLDER WOMEN TO AN OSTEOPOROSIS STUDY

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Aim: The study rates the effectiveness of 10 communication channels in recruiting older women on estrogen for an exercise/osteoporosis study. **Method**: 1,009 60-78 year old

Caucasian women, who had volunteered were asked where they learned of the study. A Chi-square test was used to evaluate if channels differentiated eligible from ineligible volunteers. Correspondence analysis (CA)/ANACOR, was used to identify channels associated with study eligibility. **Results:** 38.2% of volunteers were eligible. They learned about the study from multiple sources (27%); direct mailings to non-patients (i.e., DMV licensees, retiree groups), ob/gyn patients (18% each), and non-ob/gyn patients (10%); radio/TV (9%) and advertisements (7%). The least productive channels were community education, 'other ' sources (2% each), word-of-mouth and print media (4% each). Type of channel significantly differentiated eligible and ineligible volunteers (X^2 (9, N=1,009) = 32.5, p=00). The CA plot of row and column scores on a single dimension show that eligibility (.55) is related to advertisements (.71), radio/TV (.67), and ob/gyn mailing (.36). Ineligibility (-.34) is related to non-ob/gyn mailing (-.49), 'other' sources (-.69), print media (-.71), and community education (-.89). The singular value (row and column score correlation) is .19. The results show that some communication channels are more efficient than others in reaching eligible volunteers.

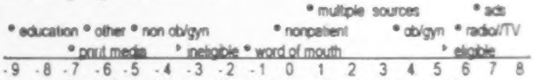

Figure 1 Row & Column Scores of Communication Channels & Eligibility Status

RECRUITMENT AND RETENTION OF OLDER AFRICAN AMERICANS IN RESEARCH (RROAAR): A PILOT STUDY

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Older African Americans participate in research at a lower rate than do other segments of the population. Efforts to include minorities in research have increased significantly over the last five years. Despite these efforts many scholars are having difficulty recruiting and retaining African Americans in funded research studies. Currently, there is no comprehensive assessment of methods for recruitment and retention of older African Americans. The purpose of this study is to address this research issue. The objectives of the study were to (1) examine barriers that prevent older adults from participating in research studies, and (2) examine the personal experiences of older African Americans as subjects in research. Twelve focus groups were conducted with 96 African Americans over the age of fifty-five. Subjects were recruited from the Detroit metropolitan area. Findings from this study suggest that older African Americans are: (1) interested in participating in research studies, (2) are more likely to participate in social science than clinical research, and (3) are more likely to require transportation to participate in studies. The Tuskegee Experiment remains a major concern for Researchers interested in recruiting older African Americans. Implications for recruitment and retention of older adults are discussed in this paper.

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PREDICTION OF DEMENTIA STATUS USING SURVEY VARIABLES: A COMPARISON OF GRADES OF MEMBERSHIP AND LOGISTIC REGRESSION.

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One problem in statistics deals with classification and prediction. We employed survey data from the Black-White Dementia sub-study of Duke Established Populations for the Epidemiologic Study of the Elderly (EPESE) to predict dementia status (total N=547, N demented=100) by two common methods of classification, Grades of Membership (GoM) and Logistic Regression. We compare and contrast the efficiency of the logistic and Grades of Membership models in the prediction of dementia status in this data set. Using 14 commonly collected ADL, IADL, demographic, depression, and health variables, we found that the logistic model was better able to predict dementia status than a GoM model with 2 pure types (c-index=0.780 vs. 0.704). Further, a smaller logistic model of only 3 variables (Age, IADL, SPMSQ, c-index=0.758) performed nearly as well as the full logistic model. An extended GoM analysis revealed 5 pure types which primarily discriminated different health/demographic groups and not dementia groups. We explore the operating characteristics (sensitivity and specificity) of each model and conclude that when the outcome is known 'crisply', logistic regression will outperform GoM in the precision of classification. However, GoM allows for greater efficiency in exploratory analysis of fuzzy outcomes.

THE PROFESSIONAL CAREGIVER BURDEN INDEX (PCBI): DEVELOPMENT AND VALIDATION.

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While the burden of family caregivers (CG's) has received a great deal of research attention, little has been paid to that experienced by professionalCG's. Development of a measure of burden for this group would facilitate further study into this topic. Using an exploratory semi-structured interview, 22 professionals responded to open-ended questions about their response to caregiving. Results from the interview lead to a formal definition of professional caregiver burden which was then used to generate 40 test items. These were reviewed by 5 experts for face validity. Twenty four revised items were then administered to 52 nursing staff working on a specialty AD unit at the Bedford VA. Four additional items were eliminated. The resulting 20 item measure showed good reliability and validity. Coefficient alpha (r = .90) and test-retest reliability (r = .75) were in the acceptable range. Support for the content validity was provided by correlations with variables such as subjects rating of their own burnout (r = .60), plans to quit current job (r=.39), active steps to find new job (r = .26), and thoughts about taking sick leave for emotional reasons (r = .59). The Professional Caregiver Burden Index (PCBI) appears to be a psychometrically sound new measure of burden for professional caregivers.

RELIABILITY AND VALIDITY OF THE DISRUPTIVE BEHAVIOR RATING SCALE FOR PATIENTS WITH DEMENTIA OF THE ALZHEIMER'S TYPE (DS-DAT).

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Appropriate outcome measures are required to evaluate the efficacy of clinical interventions developed for reducing dementia patients' disruptive behavior during personal care. The Disruptive Behavior Rating Scale (DBRS) was developed to rate the occurrence of discrete physical and verbal aggression and agitation using the Observer (3.0), a behavioral rating software package that allows timed observations to be converted directly to a computer data base. The DBRS was used to assess disruptive behaviors during bathing. Naïve raters completed pre and post ratings on videographed baths of 19 subjects and their caregivers to measure the outcome of an intervention designed to decrease disruptive behaviors. The rating protocol involved separate ratings of physical behaviors (with the sound turned off) and verbal behaviors (with the picture turned off). A series of scale revisions have been used to improve inter-rater reliability. Criterion validity was established by comparing DBRS ratings to global ratings of agitation and discomfort. Item analyses, reliability scores, and properties of the scales are presented. Limitations of the scale's generalizability are also discussed.

THE VALIDITY OF A CAREGIVER STRAIN INSTRUMENT IN DIVERSE ALZHEIMER'S CARE SITUATIONS.

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Caregiver strain is a key research construct and important for clinical assessments. Although there are many existing tools for measuring caregiver strain, few have been systematically validated in a variety of caregiving situations. This study examined the validity of a widely used caregiver strain instrument among a diverse sample of caregivers of persons with Alzheimer's disease. The tool was tested with caregivers assisting persons with different levels of disease severity and living in either community or residential settings. Confirmatory factor analysis of data from 679 Alzheimer's caregivers was used to assess structural, discriminant, and criterion validity in six types of caregiving situations. Results showed two dimensions of strain, relationship and activity restriction, had good structural validity regardless of disease severity and location of care. Lower structural validity was found for the dimensions of health strain and caregiving mastery for caregivers to severely impaired persons who lived in the community. Discriminant validity, based on the multiple dimensions of strain, was similar for caregivers of moderately and severely impaired persons regardless of the care settings. However, discriminant validity among dimensions of strain was lower when the impaired relative was mildly impaired in both community and residential settings. Hypothesized patterns of associations confirmed the criterion validity of the tool in terms of the variance and mean levels of strain. Based on these results, the overall validity of the tool is summarized and modifications of the tool are suggested to make it most useful in clinical and research settings.

ACCURACY OF STAFF ASSESSMENTS IN RESEARCH; REPORTING DEMENTIA AND ENVIRONMENTAL CHARACTERISTICS

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Due to time and resource restraints, researchers frequently rely on reports from staff for information when studying long-term institutionalized residents with dementia. This paper addresses the accuracy of staff reporting in two areas: diagnoses of residents' dementia and a variety of environmental characteristics. Staff reports are compared with the MAS-R (multifocus assessment scale - revised) for a diagnosis of dementia and with the TESS (Therapeutic Environmental Screening Scale). Analyses reveal low to moderate correlations for dementia but no relationship on environmental items. The findings are discussed in terms of how and when it is reliable to use staff reports.

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UTILIZATION OF SELF-REPORT OF EMOTIONAL RESPONSE IN PATIENTS WITH DEMENTIA

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Twenty-one older adults with dementia and sixteen healthy older adults from the community were asked to view thirty color photographs with emotional content. Subjects described the photograph content, then rated each photograph using nine-point manikin scales as to their affective response (valence) and experienced arousal. Six patients were excluded for failure to comprehend photograph content. Positive, negative and neutral photographs were selected from the International Affective Picture System (Lang, 1995) on the basis of younger adult norms, so that valence ratings for positive and negative photos were approximately equidistant from neutral, but were of comparable arousal ratings. Patients with dementia were mildly to moderately impaired (Mean MMSE = 23, range = 16-29). Internal consistency reliability coefficients for valence and arousal ratings in each group were high (.78 to .91). Correlations between the mean valence and arousal ratings of the demented and the healthy older adults for all photographs were very high (valence = .99, arousal = .90). Results indicate that patients with dementia were able to complete the photograph rating task reliably, and respond to the pleasantness and arousal of the photos in a manner comparable to healthy older adults. These findings suggest that photo rating tasks may be useful tools in the evaluation of emotional response in older adults with dementia.

Supported by NIA Grant AG08012.

DIMINISHED SELECTIVE ATTENTION TO EMOTIONAL STIMULI IN ALZHEIMER'S DISEASE

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Using the Emotional Stroop paradigm, this study examined the effect of Alzheimer's disease (AD) on inhibitory control of attention to emotional stimuli. Latency to name the print color of neutral, positive, and negative emotion words was measured in 8 persons with mild AD and 16 cognitively-intact controls of comparable age. Stimuli consisted of 72 words presented in colored type (red, green, blue, or yellow) over 6 12-item trial blocks; each trial block contained 4 neutral (e.g., *foot*), 4 positive (e.g., *warm*), and 4 negative words (e.g., *fear*) matched for word length and frequency. Relative to cognitively intact controls, AD subjects exhibited significantly longer latencies to name negative emotion words on the first two trial blocks. By contrast, there were no group differences in latencies to name neutral and positive words over trials. Diminished ability to inhibit processing of negative emotional information may contribute to the high prevalence of emotional disturbances associated with AD.

Supported by Alzheimer's Association grant RG2-96-086

ELICITORS OF EMOTION IN ALZHEIMER'S DISEASE

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Patients with Alzheimer's disease (AD) are described as becoming less emotionally responsive, and yet problematic behaviors of AD patients are often described as "catastrophic reactions". These are not contradictory observations but suggest that little attention has been directed at understanding the elicitors of emotional responses, the context, and the AD patient's premorbid style of expressing emotion. For this study, informants of 19 AD patients and 16 older controls were interviewed using the Emotion Status Interview (Friesen & Danner) to investigate happy, sad, anger, fear and disgust. These emotions were expressed by both groups. However there were differences between AD patients and controls in the elicitors arousing these reactions. For example, for sadness, AD patients more than controls responded less to the loss of loved ones, and for anger AD patients more than controls showed increased responses to their activity being frustrated and decreased responses to their values/attitudes being challenged. Despite such differences there was stability in expressive style.

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IMPLICATIONS OF THE CHANGING CONTEXTS OF AGING AMONG AMERICAN INDIAN ELDERS:

R. John, Minority Aging Research Institute, University of North Texas, Denton, TX 76203.

Participants:

E. E. Chapleski (Institute of Gerontology, Wayne State University, Detroit, MI 48202) Long Term Care Preferences and Attitudes Among Great Lakes American Indian Families: Cultural Context Matters.

S. McFall, T. Solomon, D. Smith, & L. Perkins (Oklahoma Prevention Research Center, Oklahoma City, OK 73190 & Cherokee Nation Health Division) A Pictorial Health Assessment of Older Cherokee Clinic Patients.

C.H. Hennessy & R. John (Health Care and Aging Studies Branch, Centers for Disease Control and Prevention, Atlanta, GA 30341 & MARI, UNT, Denton, TX 76203) Chickasaw Indian Family Caregivers' Views of the Helpfulness of Long-term Care Services.

R. John, T. Dyeson, & B. McMillian (Minority Aging Research Institute, University of North Texas, Denton, TX 76203) Betrayal of Trust: Elder Maltreatment Within an American Indian Community.

Discussant:

N. VanWinkle (Oklahoma State University, College of Osteopathic Medicine, Tulsa, OK 74107)

American Indian elders age in place within a context unlike that of other elders in the U.S. Although the context of aging is unique in many respects, most of the same social processes that are changing the experience of aging within the general population are evident among American Indians including increased longevity, population growth, smaller family size, increased prevalence of chronic illness and disability, imposition of managed care, and inadequate funding for aging services. This symposium will address how cultural values and contextual change influence attitudes and behaviors towards a number of long-term care issues, end-of-life decisions, functional impairment, self-assessed health and other measures of well-being, shape the use of long-term care services among family caregivers, and play a role in the breakdown of family care represented most clearly by the existence of elder maltreatment.

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EXPANDING THE LONG TERM CARE OMBUDSMAN PROGRAM INTO THE HOME AND COMMUNITY.

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Participants:

I. C. Freeman, (Advocacy Center for Long-Term Care, Bloomington, MN 55425) The Long-term Care Ombudsman Program in Minnesota: Results and Issues in an Expanded Mandate.

D. Nebel, (Long Term Care Ombudsman, Cleveland, OH 44115) The Long-term Care Ombudsman Program in Ohio: Efforts to Strengthen Advocacy Within Existing Mandates and Expanded Need.

D. A. Menio, (CARIE, Philadelphia, PA 19107) The Long-term Care Ombudsman Program in Pennsylvania: Effective Advocacy in the Absence of a Mandate.

Discussant:

W. F. Benson, (Benson & Benson, Assoc., Washington, DC 20005)

As the long term care system and the provision of health care in this country continues to evolve and change, older adults need an advocate more than ever before. Although Long Term Care Ombudsman Programs differ from jurisdiction to jurisdiction, the federal mandate securely places an advocate in the community for those in nursing homes and personal care homes. The question of advocacy for those receiving home and community-based care has largely been left to the states. In addition, the advent of managed care has brought in new concerns and a new level of advocacy. This symposium will provide background on the ombudsman program, review efforts in three states to provide advocacy inclusive of those in all long term care settings, and provide a long term view of the program from its inception to its future.

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END-OF-LIFE DECISION MAKING: CATHOLIC, JEWISH, ISLAMIC, AND BUDDHIST PERSPECTIVES

K. Braun, School of Public Health, University of Hawaii, 1960 East-West Rd., Honolulu, HI 96822

Participants:

H.A. Hai & A. Husain (Northwestern University, Chicago, IL 60611) Muslim Perspectives Regarding Death, Dying, and End-of-Life Decision Making

W.N. Kavesh (Philadelphia VA Medical Center, Philadelphia, PA 19104) Jewish Perspectives on End-of-Life Decision Making

R.Y. Nakasone (Pacific School of Religion & Graduate Theological Union, Berkeley, CA 94709) Buddhist Issues in End-of-Life Decision Making

M.Rowell (Hospital for Sick Children, Toronto, Ontario) Christian Perspectives on Euthanasia and Assisted Suicide

Discussants:

P.L. Blanchette (University of Hawaii, Honolulu, HI 96822)

J. Lynn (George Washington University, Washington, DC 20037)

The U.S. is comprised of individuals from a number of religious traditions. In fact, freedom of religion was one of the country's founding tenets. Each religion, however, has its own principles and traditions that influence practices relative to death and dying. Most hold life as sacred and oppose suicide. Yet in the face of life-extending technology, the issues are not black and white; rather they pose questions for which answers are not clearly available in historical religious doctrine. How are religious tenets being applied to questions of assisted suicide, the withdrawal or withholding of treatment, organ donation, and advance planning? This symposium explores end-of-life decision making in four religious traditions--Buddhism, Christianity, Islam, and Judaism--with presentations by religious scholars, health care providers, and spiritual advisors representing these traditions. As health workers come into increasing contact with people from different religious backgrounds, it is important to understand religious-based views of death and dying and how they are evolving through debate among scholars and practitioners within these religious groups.

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CONNECTING PEOPLE – PROFITABLE CONNECTIONS: NETWORKING TECHNOLOGIES AND SERVICES FOR ELDERS, CAREGIVERS, AND PROFESSIONALS

M. Borchelt, Dept. of Geriatrics Research, Humboldt University Berlin, Germany, S. Kwon, Berlin Center of Public Health, Research Consulting, Technical University Berlin, Germany, K.A. Smyth, University Alzheimer Center, Case Western Reserve University, Cleveland, OH, 44106.

Participants:

K.A. Smyth, & J.H. Rose (University Alzheimer Center, Case Western Reserve University, Cleveland, OH, 44106) Can Caregiver Support Group Goals, Processes and Benefits be Achieved through Computer-Mediated Communication?

B. Tarlow & D. Mahoney (Hebrew Rehabilitation Center for Aged, Research and Training Institute, Boston, MA 02131-1097) Reach for TLC - Telephone-Linked Care.

S. Kwon, R. Nieczaj, S. Mix, G. Trilhof, M. Borchelt, E. Steinhagen-Thiessen (Dept. of Geriatrics Research, Humboldt University Berlin & Berlin Center of Public Health, Technical University Berlin, Germany) Hi-Fi – Lo-Fi: Initial Usage Patterns in a Videoconferencing Network for Mobility-Impaired Elderly, Close Others, and Gerontological Professionals.

R. Nieczaj, S. Kwon, S. Mix, G. Trilhof, M. Borchelt, E. Steinhagen-Thiessen (Dept. of Geriatrics Research, Humboldt University Berlin & Berlin Center of Public Health, Technical University Berlin, Germany) When and Why is Videoconferencing Used by Elderly and Caregiving Consumers in Geriatric Rehabilitation?

Discussant:

S.J. Czaja (Miami Center on Human Factors and Aging Research, Dept. of Psychiatry and Behavioral Sciences, University of Miami School of Medicine, Miami, Florida)

Age-associated disabling diseases such as Parkinson's and Alzheimer's diseases lead to an increased need for geriatric services including necessary technical aids and devices. As a result of decreasing financial ressources, western societies will be increasingly challenged by the task of preserving independent living conditions and sufficient quality of life for handicapped older citizens and their caregivers. In this context, it is crucial to continue to systematically seek tools and technologies which may help to solve the task lying ahead. Most recent technological achievements can be considered to be the initiators of a „digital century" that will span the globe and make face-to-face communication or retrieval of information independent of the geographic location. These achievements, for instance, need to be evaluated as to their potential to alleviate care for homebound elderly individuals. The symposium will discuss findings of recent studies investigating the way modern technology can support handicapped elders, caregivers, and professionals. Study reports will cover a broad spectrum of networking technologies and services, i.e. computer-mediated communication, telephone-linked care, networked video-conferencing, and computer-based information services.

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INVOLVING THE PUBLIC IN SHAPING SOCIAL SECURITY POLICY FOR THE 21ST CENTURY

Y-P Chen, Gerontology Institute, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125 and S.E. Rix, Public Policy Institute, AARP, 601 E Street, NW, Washington, DC 20049.

Participants:

J. Rother (AARP, Washington, DC 20049) Engaging the Public In Discussion and Debate, I.

M. Phillips (Concord Coalition, Washington, DC 20036) Engaging the Public in Discussion and Debate, II.

C. Lukensmeyer (Americans Discuss Social Security, Washington, DC 20006) Hearing What the Public Wants: Citizen Engagement as a Process

R.A. Rosenblatt (*Los Angeles Times*, Washington, D.C., 20006) The Media Take on Social Security

Discussant: Y-P Chen, Gerontology Institute

By 1998, Social Security–the proverbial "third rail of politics"–was moving up on the political agenda. The President was calling for a year of discussion, public education, and debate on the problems facing Social Security and promising a legislative reform package by 1999. Some members of Congress had already introduced or were planning to introduce their own bills to restore long-term financial stability to the system.

Few public programs touch as many Americans as Social Security, and few issues are as emotionally charged as Social Security reform. Yet the public, whose confidence in the ability of Social Security to pay its bills in the future has weakened, remains woefully ignorant of how the program works and what the financing problem involves.

This symposium will bring together leaders of the major Social Security public education and engagement undertakings as well as the media to review the year's activities and outcomes. Drawing on information gleaned at public forums established at the President's request as well as by private initiatives, speakers will discuss and evaluate the effectiveness of efforts to (1) involve the public in widespread discussion and debate on Social Security, (2) increase public understanding of the program's contributions to well-being and its financing problems, and (3) solicit public input on reform options. They will examine the year's successes and failures, assess what we have yet to learn, and provide their expert perspectives on where Social Security reform is heading. The symposium will be of particular interest to Social Security specialists, policy analysts, and researchers.

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NURSING ASSISTANTS AND HOME CARE PARAPROFESSIONALS: UNDERRECOGNIZED STRENGTHS AND ABILITIES

N.A. Kramer, Box 59, Teachers College, Columbia University, New York, NY 10027;
M.C. Smith, Peninsula Hospital Center, Far Rockaway, NY 11691.

Participants:

M.C. Smith, N.A. Kramer, Overview and Analysis of Current Training Approaches for Nursing Assistants: Implicit Assumptions.

D.R. Oberer (Greystone Park Psychiatric Hospital, Morris Plains, NJ 07950) Independence and Dependence in Activities of Daily Living: People with Dementia and Their Caregivers.

N.A. Kramer, M.C. Smith, J. Dabney, T. Yang-Lewis (Cobble Hill Health Center, Brooklyn, NY 11201) Nursing Assistants' Conceptions of Quality Care for Nursing Home Residents with Dementia and a Peer-Oriented Training Model.

S.M. Albert, C. Weber (Gertrude H. Sergievsky Center, Columbia University, New York, NY 10032) Paraprofessional Home Care: Typology of Care Needs and Service Provision.

Discussants:

M.J. Koren (Fan Fox and Leslie R. Samuels Foundation, New York, NY 10111)

K.S. Van Haitsma (Philadelphia Geriatric Center, Philadelphia, PA 19141)

Nursing assistants provide some 80-90% of all the direct, day-to-day care nursing home residents receive. Similarly, home care workers play a very significant role in the care of chronically ill, disabled, or cognitively impaired older people living at home. The premise of this symposium is that the abilities and strengths of nursing assistants and home care workers are often underappreciated, and its purpose is to present evidence of these underrecognized capabilities and to discuss implications for the training and support of these caregivers. Observational and interview data will be presented which suggest that nursing assistants do not generally encourage dependence in their care recipients, as has been found in studies of other caregivers of older people, that nursing assistants are able to articulate a substantial body of ideas and guidelines regarding the care and management of people with dementia, and that home care paraprofessionals are often able to function well despite stressful working conditions, isolation, and little support. Current training and support approaches, which tend to emphasize one-way transmission of information from expert professionals to nursing assistants and home care workers, will be presented, and an alternative, peer-oriented model of training which emphasizes the interchange of information and support among nursing assistants and home care workers will be proposed.

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PERFORMANCE AS A CRUCIBLE FOR FORGING INTERGENERATIONAL ALLIANCES

A. D. Basting, Center for Twentieth Century Studies, University of Wisconsin-Milwaukee, Milwaukee, WI 53201.

Due to media representations and generational isolation, adults at the far ends of the life course have been shown to harbor inaccurate cross-generational stereotypes. This humanities-based study assesses the views of younger and older participants in several intergenerational theater groups in the United States, as well as the process by which those views were transformed. The study includes a 1996 performance by New York-based Elders Share the Arts, a 1996 performance of New York-based Roots & Branches Theater, and a 1997 performance of Time Slips at the University of Wisconsin-Oshkosh. In all three situations, members of both generations began with hesitancies and emerged with more a nuanced understanding of each other. Facing the challenges of theatrical performance created a common bond for the participants, and the nature of theatre, which involves taking on a new role, enabled participants to transform both themselves and the relationship between generations.

PLANNING FOR THE ELDER BOOM: LESSONS FROM THE PAST

Rosemary K. Chapin, School of Social Welfare, University of Kansas, Lawrence, KS 66045.

The changing context of aging influences not only our understanding of issues related to the current elderly population, but also how we plan for the 21st century when the size of the baby boom cohort will accelerate the aging of the U.S. population. Our current time period, the end of the 20th century, was the focus of forecasts made by early social service professionals writing about the field of aging in the Encyclopedia of Social Work (formerly the Social Work Year Book). By examining content on aging beginning with the first edition in 1929, it is possible to discern how the images of aging changed, and how these changes were reflected in forecasts of service needs of the future elderly population. The purpose of this presentation is to examine accuracy and utility of these forecasts, and to illustrate how insights gained from this analysis can be used to develop more effective policy and practice strategies for the elder boom coming in the next century. Content analysis techniques are used to trace how forecasts of the needs of the population 65 and over at the end of the 20th century shifted as economic and social conditions changed. Factors that influenced accuracy of earlier forecasts are identified, and ways in which these factors may also bias current forecasts are examined. Implications of this analysis for social service professionals attempting to make projections and plan for the elder boom are discussed. Since expectations shape planning and service provision, it is crucial that we understand factors likely to bias forecasts of future service needs. Armed with this understanding, a more accurate image of the needs and strengths of the future elderly population can be crafted to inform planning for the elder boom.

THE DEPICTION OF OLDER ADULTS AND AGING IN THE COMICS PAGES: A CONTENT ANALYSIS OF THE COMICS SECTIONS OF TWO MIDWESTERN URBAN NEWSPAPERS

F. Nuessel, Modern Languages, University of Louisville, Louisville, KY 40292, A. V. Stewart, Center for Aging, University of Louisville, Louisville, KY 40292.

This paper reports on a content analysis of the representation of aging and older adults in 40 syndicated cartoons in 2 urban Midwestern newspapers during the six-month period September 1, 1997 to February 28, 1998. The study contains: (1) an analytical review of previous research on the media representation of older adults; (2) a content analysis of the 40 syndicated comics in 2 urban Midwestern newspapers (The Courier-Journal [Louisville, KY] and The Indianapolis Star); (3) a categorization and discussion of the age-related issues; (4) a set of recommendations for the instructional use of these materials in gerontology courses; (5) a comprehensive bibliography; (6) an Appendix with a list of the daily and Sunday comics in each paper; (7) an Appendix with selected examples of cartoons in the categories specified in section (3) above. A copy of the paper will be made available to the participants.

WAYS OF KNOWING: AN INTERDISCIPLINARY STUDY OF EPISTEMOLOGY AND WISDOM ACROSS THE LIFESPAN.

P. Spradling, Andrus Gerontology Center, University of Southern California, Los Angeles, CA 90089-0191.

The study of epistemological beliefs is a young field concerned with persons' beliefs about knowledge claims. Developmental trends from an absolutist (right or wrong, black or white) perspective toward a more dialectical or evaluativist approach have been found among college students. Limited evidence of age-related trends toward increased dialectical or reflective thought have been found in the few lifespan studies conducted.

Studies of wisdom have likewise shown limited support for age-related trends toward increased "wisdom-related knowledge" among older populations. The goal of this presentation is to demonstrate that empirical efforts in these two relatively young areas of scientific inquiry have produced convergent findings and yet are unaware of one another.

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INDIVIDUAL VARIATION IN CARE PLANS: RESULTS OF A NATIONAL STUDY OF LTC CASE MANAGERS

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Case managers (CMs) in publicly funded home and community based LTC programs use standard assessment schedules and follow program guidelines when determining the type and amount of services to authorize. However, they are also expected to use their professional judgment and experience to meet the individual needs of their clients with personalized care plans. This study quantifies individual and agency variation in the type and amount of services that would be arranged for typical LTC clients. Data were collected using a postal survey of 830 CMs from 187 agencies in 11 state-wide LTC programs. Respondents indicated the services they would authorize for clients described in 18 hypothetical case studies. The cases varied in terms of client preferences, risk factors and available resources. To make comparisons across state-wide programs possible, definitions of available services (ie homemaker, personal care and adult day care) were standardized. Analysis was done with hierarchical linear regression to simultaneously take client, case manager and agency factors into account, and to control for the fact that clients are nested within CMs and CMs are nested within agencies. The results indicate that care plan allocations were most sensitive to client functional status and available resources. Client preferences not to have paid home care had only a modest effect. CMs trained as nurses allocated slightly more resources than social workers and non-professional case managers. Also, CMs who specialize in intake tasks were more cost intensive than those who perform ongoing tasks or do not specialize. Agency policies for supervisory approval of new assessments led to slightly lower costs. There was variation among CMs not accounted for by background variables. Comparisons are made to estimates from observational data (e.g., Channeling). The results suggest factors that agencies and state programs should consider when hiring and training CMs. Evidence that similar clients may be treated differently raises important concerns about fairness and efficiency.

FROM CONSTRUCT TO PRODUCT: THE ACTIVITIES OF DAILY LIVING IN ASSISTED LIVING FACILITIES.

P.C. Carder. Institute on Aging, P.O. Box 751, Portland, OR 97207.

Most efforts to assess the "functional ability" of elderly persons are based on the Index of Independence in Activities of Daily Living (ADL) developed by Katz et al. and the Instrumental Activities of Daily Living by Lawton and Brody. For over three decades, policy makers and practitioners have used ADL/IADL to assess service need. Oregon's assisted living (AL) facilities, a community-based housing program based on a "social model," use these constructs as the foundation for service delivery and fee assessment. As a market-driven proprietary service, assisted living translates the ADL/IADL constructs into marketable products apparently available for independence-seeking elders. This paper is based on an 11-month ethnography in two AL facilities and participant observation in three 40-hour administrator training courses. It is suggested that the social model of care is threatened by the use of assessment procedures grounded in a disability model. Current assessment strategies define the individual as dependent or independent based on the person's ability to perform a set of basic daily chores with or without help. Although these practical matters are not insignificant, AL resident interviews suggest that the items included in the ADL/IADL scales are not how individuals define their feelings of independence. Instead, independence is linked to 1) making a contribution, 2) participating in important activities, and 3) making important decisions. A reconceptualization of the assessment process, based on a social model for community-based living, is suggested.

STANDARDIZED SCREENING OF ELDER PATIENTS' NEED FOR SOCIAL WORK ASSESSMENT IN PRIMARY CARE: USE OF THE SF36

Barbara Berkman, Columbia University School of Social Work, New York, New York, 10025 and Massachusetts General Hospital, Boston, Ma. 02114

Fewer hospitalizations and decreased hospital lengths of stay have resulted in increased needs for extensive support services and continuing care planning for the elderly. Early identification of elder patients needing community and hospital non-medical services is necessary so that timely appropriate services can be delivered. This study examines the viability of using a new model for screening psychosocial needs of primary care patients. The major question focused on whether a standardized Health Related Quality of Life questionnaire (the SF36) can be used independently as a screen predicting elder patients' needs for psychosocial assessment. In addition, the question of which SF36 sub scales a social worker would use in screening was explored. 313 primary care elderly patients completed the SF36 questions plus an additional 21 social work specific traditional screening questions. A social work question was considered for exclusion from future screenings if two correlation criteria were met among specific social work screened problems and the 8 SF 36 sub scale scores. Nine of the 21 social work specific problems met criteria for exclusion. The SF36 screens adequately for IADL needs but does less well in 12 sensitive psychosocial areas. In order to gain insight into how the social work case manager used the SF36 sub scale items in judging who needed an assessment, relative risk ratio analyses were computed for each SF36 sub scale. The social worker primarily used questions on six of the eight sub scales, questions very reflective of psychosocial issues which social workers address in traditional screening.

DEVELOPMENT OF A COMPREHENSIVE ASSESSMENT INSTRUMENT FOR DETERMINING OPTIMAL LOCUS OF LONG-TERM CARE

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A variety of community care options have recently become available to New Jersey residents applying for Medicaid long-term care benefits. In the interest of best fit between resource availability and consumer need, a comprehensive assessment instrument (CAI) was developed for determining the optimal locus of care for each client. Development of the CAI was based on the assumption that locus of care is influenced by attributes of the caregiver and caregiving environment, functional and cognitive status of the client, complexity of care, and needs for restorative nursing and skilled rehabilitation. The CAI contains 101 items gleaned from various standardized assessment instruments and distributed among 7 subscales that correspond to assumed locus of care determinants. Preliminary analysis of CAI data from 39 clients revealed internal consistency reliability @- >.75 for the functional status, cognition, and restorative nursing subscales, as well as interrater reliability of >.80 for all except the functional status and caregiver subscales. Work continues toward: 1) establishing interrater reliability of ≥.80 for each subscale;

2) demonstrating internal consistency reliability (@∝ ≥.90) and construct validity for the total CAI based on data from 250 subjects approved for institutional care and 250 approved for community care; and 3) developing a scoring system for determination of optimal locus of long-term care.

PREDICTING HIGH USE OF CASE MANAGEMENT IN A HOME CARE PROGRAM.

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Case management (CM) has become a ubiquitous feature of long-term care programs. CM has been found to vary as a result of variations in program goals, case management tasks, organizational settings, program designs, and target populations. Little empirical data are available on variations in CM resulting from variations in client characteristics. CM programs have uniform guidelines on assessments, allocating and arranging services, and monitoring clients, and often result in a "cookie cutter" model of case management that may or may not be responsive to variations in client needs. Another important barrier affecting the responsiveness of CM service delivery in long-term care is the tendency of policy makers to severely restrict the funding for CM in preference for funding actual services needed by disabled or frail older people. The purpose of this study is to present empirical data on the predictors of high use of case management time in a home and community-based services program funded by a Medicaid Waiver.

Multiple regression analysis revealed stability of informal support, mental health conditions, and quality of service provider agencies to be related to greater use of case management service which was measured by type and amount of activity needed per client. However, clients moved in and out of high risk and high service use levels, making it difficult to assign clients to different levels of risk on a long term basis. Implications of this study address program design issues such as the appropriate level of staffing, factors to consider in the allocation of caseloads, and improving assessment data on mental health risk factors to enable case management programs to effectively maintain frail, older clients in the community.

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QUALITY ASSESSMENT OF THE LONG-TERM CARE INSTITUTIONS IN NORTHERN TAIWAN

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As the growing of disabled aging population and the increased percentage of nuclear families in Taiwan, the need for long-term care institutions is increasing rapidly. Currently there are three types of long-term care institutions in Taiwan including elderly homes, intermediate care facilities (ICF) and skilled nursing facilities (SNF). The purpose of current study is to investigate the care quality of all three kinds of long-term care institutions in northern Taiwan for the reference of the discharge referrals in an acute care hospital. Only registered long-term care institutions were included in current study. Totally 10 elderly homes, 20 ICF and 3 SNF were visited by the researchers and/or research assistants. It is found that the services provided by ICF was very similar to the services provided by SNF and the services provided by elderly homes did not include change and care of N-G tube, foley catheter, and trachea tube; suction; rehabilitation; and treatment diet. Quality indicators of environmental structures and care outcomes were evaluated for all three types of institution. SNF performed well in all indicators except inadequate space and inadequate arrangement of the outdoor activities for the residents. Structural indicators which performed poorly by over 30% of the ICF were inadequate emergency call system, labeling of the room, recreational facilities, emergency care equipment and rehabilitation facilities; and lack of space for outdoor activities. Care outcomes including arrangement of outdoor activities and nursing record appeared to be under satisfactory for half of the ICF. For elderly homes, 60% of them appeared poorly in the hand rail conditions, emergency call system and emergency care equipment. The cleanness of clothing, wound dressing, sheet, overall cleanness of residents, and daily activities arrangement were less satisfactory than ICF and SNF. The completeness of nursing records was far less than ICF and SNF. Elderly homes also appeared to have inadequate arrangement for outdoor activities. The results of this study provide a picture of the quality of the long-term care institutions in northern Taiwan for the reference of the discharge referrals and a based for further health policy decisions.

SERVICE UTILIZATION AMONG OLDER AND YOUNGER PERSONS WITH HIV/AIDS: AN ANALYSIS OF CALIFORNIA DATA

Charles A. Emlet, Solano County Health & Social Service Department, 1735 Enterprise Dr. Fairfield, CA 94533.

Throughout the AIDS pandemic, a consistent 10% of all cases of AIDS have been diagnosed in persons age 50 years and older. By June of 1997, this accounted for over 63,000 cases of AIDS in persons age 50+ years. Despite these data, service utilization studies focusing on persons with HIV/AIDS have virtually ignored age as an independent variable. This study examined 571 persons with HIV/AIDS who received services from one of 42 AIDS Case Management Programs across California. Cases were classified into three age categories: age 30-49, 50-59 and 60 years and over. Results: The descriptive analysis revealed that persons in the older age groups were significantly more likely to be female ($p<.05$), to live alone ($p<.01$), and to have private insurance ($p<.05$). There was a positive, non-significant relationship between increased age and higher mortality rates ($p=.07$). Multiple regression analysis found age not to be significantly associated with service utilization in examining medical, psychosocial or in-home services. Functional dependence, HIV/AIDS diagnosis, geographical location, and insurance status were consistent correlates of service utilization across all age groups.

HOME-BASED PRACTICE WITH OLDER ADULTS: CHALLENGES AND OPPORTUNITIES IN THE HOME ENVIRONMENT

K. M. Hash, M. J. Naleppa, School of Social Work, Virginia Commonwealth University, Richmond, VA 23284.

Although the differences between agency-based and home-based practice with older adults have been acknowledged in the literature and among practitioners, little attention has been given to the impact of the home environment on the intervention process. The purpose of this qualitative study was to explore the impact of the home environment on the intervention with older clients. Data were collected through in-depth interviews with social work practitioners employed in a variety of home-based settings (N=28). The interviews solicited events and circumstances which exist in the home environment and impact the intervention process. Practitioners' responses to the events and the successes of the responses were also of interest. The data analysis included grounded theory and the use of peer-debriefers. Respondents noted the physical environment, the presence of other

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persons, client-practitioner boundary issues, and visual and auditory stimuli as events which provide challenges and/or opportunities in the intervention process. Distinct environmental factors in home-based practice in urban, suburban and rural environments were also found. This presentation will discuss the findings of the study. Practice principles that were developed from the data will be also be presented.

ACUTE CARE UTILIZATION PATTERNS OF HIGH-RISK HOME AND COMMUNITY-BASED SERVICE CLIENTS

J.K. Straker, S. Mehdizadeh, and R. Applebaum, Scripps Gerontology Center, Miami University, Oxford, OH 45056.

The Elderly Services Program (ESP) is a tax-levy funded home and community-based service program in Hamilton County, Ohio. With funding from the Robert Wood Johnson Foundation, ESP developed a demonstration project to link acute and community-based services. As part of the demonstration, a protocol was developed to identify clients who were at high risk for acute care use. During the first 11 months of the demonstration 309 high risk clients were identified and were randomly assigned to receive the services of a community nurse liaison (CNL) or to receive regular case management services. One hundred fifty-four clients were interviewed in person at baseline, 98 after six months, and 59 after one year. After 18 months of the intervention, acute health care use was examined for the two groups using both self-reported incidents and Medicare data. Changes in health locus of control, mood, satisfaction with services and medical care, and self-reported health were also examined.

Results show few overall differences between the groups. Many clients in both groups reduced their acute care utilization during the study period. Differences in acute care utilization were noted for some client subgroups, and differences in CNL utilization were noted among the intervention group. These findings suggest that protocols can be developed to identify those clients most likely to benefit from a nurse liaison in addition to traditional case management.

PERSONAL RESPONSE SYSTEMS FOR LOW-INCOME ELDERS IN SOUTHEASTERN MICHIGAN

B.F. McGadney, School of Social Work, Wayne State University, Detroit, MI. 48202.

The American Red Cross, in 1988, initiated Lifeline an emergency response system for elders in five chapters across the country. The overall goal of the program is to help frail elders maintain their independence at home. Systems such as this will be critical for the well-being of the growing numbers of elderly baby-boomers living in the New Millennium. Responding to a growing need to provide this service to underserved and at-risk elders unable to pay for it, the Michigan chapter, supplemented entirely by local funding, covered some or all of the cost for needy clients. Data has been collected on 379 of these clients at baseline and 6 months after installation of the service. This presentation will include a descriptive profile of clients (82% African American, 330 females and 50 males), including chronic health status, ADL, leisure activities, social supports, and reasons for discontinuation of the service. Findings, also to be reported, indicate that elders' use of emergency response system significantly decreased their use of emergency room services ($p \leq .01$) and over-night stays ($p \leq .001$) in the hospital.

THE COMMUNITY CARIE LINE: BRINGING A SUCCESSFUL MODEL OF ADVOCACY TO CITY NEIGHBORHOODS

J. Morith, CARIE, Philadelphia, PA 19107.

"Community CARIE LINE" is an effort to reach more consumers in their own neighborhoods, and forge stronger partnerships with community agencies in identifying older adults in need of assistance. This outreach effort involving a series of sessions educates older adults at various community settings. Program goals include: 1) to provide educational workshops for seniors on issues such as crime, elder abuse, entitlements and long term care; 2) to be available on-site for individual consultation, provide consumer tips and options counseling, and initiate advocacy efforts on behalf of participants; and 3) to encourage the participants to play an active role in their community by sharing information learned and identifying homebound individuals in need of assistance and advocacy. This poster will inform participants of ways in which a grassroots effort works to reach those who may not be helped through traditional programs.

Title : Coping with Caring - the role of Support Networks and the Community Nurse.

A.Wales and M. Gilhooly, Centre of Gerontology and Health Studies, University of Paisley *and* I. Curzio, Nursing Research Initiative for Scotland, Glasgow Caledonian University.

Although family and friendship networks are regarded as essential in the maintenance of vulnerable elderly people in the community, there is relatively little research on the role of support networks in successful community care. In addition, the role that community nurses play in the support networks of community carers has never been explored. When, how and why then might the community nurse change from being an 'outsider' to become an important member of the carer's support network? In what ways. do the characteristics of the existing network facilitate this process? How does the community nurse perceive her/his role with the carer, and what is the impact of their

interactions in terms of the carer's well being and ability to continue giving care in the community?

This poster has been designed to describe the rational behind this ongoing research project, highlighting it's main aim and objectives. The method of investigation is given special attention, to illustrate the pictorial network mapping tool (based on Kahn and Antonucci's concentric circles technique), which forms the focus of carer interviews

LONGITUDINAL STUDY FOR THE CHANGE OF HEALTH AND SOCIAL SERVICE USE OF STROKE PATIENTS AND THEIR FAMILIES.

H.Yamada, Doshisha University, Kyoto 602-8580 Japan, H.Sugisawa, H.Okabayashi, Y.Sugihara, H.Shibata, Tokyo Metropolitan Institute of Gerontology.

Despite extensive research on health and social service use of elderly, few studies used longitudinal data to clarify factors which predicts the change of service use. This study examines factors predicting initiation of service use by using longitudinal data of families of stroke patients who were discharged from three rehabilitation hospitals in Tokyo. Interviews were done at two months and at 18 months after discharge. The number of cases was 136, only those who replied both times. Two categories of services were investigated: home services and outpatients services. Home services involve home makers, visiting nurses, home rehabilitation, and bath service. Outpatients services refers to day service. As independent variables three factors were used : 1) four needs factors by patients and their families (patients' ADLs, behavioral problems, social activity, and caregivers' feelings of burden); 2) three enhancing and hindering factors (informational support from professionals, tangible and informational support from family and relatives); and 3) two control factors (caregivers' age and relationship to patients). Changes from non-use to use in those services were analyzed by Logistic regressions.

Our findings were as follows: 1) low ADLs of patients and lack of informational support from families and relatives were significantly related to the use of home services in Time 2; and 2) high feelings of burden of caregivers and lack of tangible support by families and relatives significantly predicted the use of outpatients services at Time 2. These results suggest that although outpatients services were aimed to satisfy the needs of patients, needs of caregivers were more influential for the use of services.

FORMAL HOME CARE USE BY THE DISABLED ELDERLY: THE IMPACT OF PUBLICLY-FUNDED HOME CARE PROGRAMS

N. Gemborys, University of Massachusetts at Boston, Boston, MA 02125-3393

The public sector's response to the desire of most functionally disabled elderly to remain at home has been incomplete and fragmented. State differences in the availability of publicly-funded home care services provide a unique opportunity to assess whether the scope of publicly-funded home care services has an impact on the probability that the at-risk elderly receive needed services. Using data from the 1989 National Long-Term Care Survey, this study examined the relationship between the receipt of formal home care services and the generosity of the publicly-funded home care programs in one's geographic residence. The generosity of publicly-funded services was determined by z-scores representing the 1992 Medicaid, Medicare, and non-Medicaid home and community-based expenditures for individuals over 65 years in each state. Findings indicate that the likelihood of receiving formal home care services is significantly associated with the generosity of publicly-funded home care programs. Among those elderly with formal home care providers, the amount of formal home care services received was influenced by the generosity of publicly-funded home care programs. These findings will be useful in developing long-term care policy that effectively targets the at-risk elderly.

AGING IN PLACE: A PROPOSAL FOR RURAL COMMUNITY-BASED CARE FOR FRAIL ELDERS

S. M. Beidler, M. Bourbonniere, University of Pennsylvania School of Nursing, Philadelphia, PA 19104

Rural health care is hampered by uneven development of services and multiple definitions of rurality. One of the most vulnerable populations in this setting is community-residing frail elders. We propose a model of care for these frail elders that incorporates and extends several models employed primarily with the urban elderly. The model draws as well on definitions of rurality and rural nursing theory and emphasizes the contributions of advanced practice nurses as coordinators of a collaborative system of care. Issues of cost and quality, as well as the strengths and limitations of the model are addressed.

CENTER CHARACTERISTICS, CLIENT CHARACTERISTICS, AND REFERRAL/ DISCHARGE PATTERNS IN ADULT DAY SERVICES: THE OKLAHOMA EXPERIENCE

S. Travis, B. Duer, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73190.

As part of the activities of a statewide task force convened by the Oklahoma Department of Human Services - Division of Aging Services, all adult day services organizations licensed in Oklahoma as of June 1, 1997 were surveyed to learn more about this developing community-based, long-term care option in a state that has vast rural and frontier spaces. Nineteen of 20 eligible organizations (95%) responded to the survey. On average, budgets are modest (mean=$184,000), while staff to participant ratios are generally better than those required for licensure. The most common sources of funding are Title XX (40%) followed by private pay (30%). Most of the participants (54%) live with spouses or adult children. About half (42%) are moderately or severely cognitively impaired and about one-third (34%) have problems with bowel or bladder incontinence. Senior centers and self referrals are the most important referral sources in the state. Participants tend to stay in care about 12 months, on average, and to be discharged to nursing homes (46.4%) when adult day services are no longer appropriate. Challenges, barriers, and opportunities for further development of adult day services are discussed.

AN EXAMINATION OF CONSUMER-DIRECTED CARE FEATURES WITHIN A TRADITIONAL CASE MANAGEMENT AND HOME CARE SERVICE DELIVERY SYSTEM

S. Goldman, M.P.H., J. Berman, Ph.D., R. Lando, M.S., and J. Chin, B.A. New York City Department for the Aging, 2 Lafayette Street, New York, NY 10007.

Interest in and the adoption of consumer direction continues to grow within the aging network. Even traditional case management and home care service delivery systems are being influenced by consumer-directed concepts. The New York City Department for the Aging conducted a qualitative analysis of 15 case management agency directors, 15 home care agency supervisors and 100 consumers in order to explore if, and to what extent, consumer-directed care concepts have permeated the traditional case management and home care service delivery system. Telephone interviews were conducted to examine the role of the consumer in care planning, relationships between the consumer, case manager, and home care worker, evidence of self direction by consumers, and consumers' interest in assuming a greater role in their care. Preliminary results indicate that even within a traditional system of providing care, consumers have found informal opportunities to self-direct their care. Consistent with findings from other studies, consumers were interested in performing certain tasks, such as hiring but were not interested in performing other tasks, such as payroll administration. Other issues to be discussed include case management directors' and home care supervisors' perceptions of consumers' willingness to assume more responsibility as well as how these perceptions compare to consumers' responses. Group profiles and study implications will also be discussed.

RELATIONSHIP BETWEEN TYPE OF HOUSING FOR THE ELDERLY AND UTILIZATION OF IN-HOME SUPPORT SERVICES.

Barbara H. Rinehart, Graduate School of Social Service, Fordham University, 113 W. 60th St., NYC, NY 10023.

Senior housing subsidized by the Government has been provided as an option for independent living. As seniors have aged-in, questions have arisen as to the relationship between such specialized housing and residents' utilization of in-home services. This study compared two (2) groups of urban elderly (N = 189) living in different types of independent housing (age-segregated or age-integrated) with respect to their patterns of service utilization.

Respondents in this study sample who lived in specialized senior housing (age-segregated) are older, poorer, more functionally disabled and are more likely to have Medicaid health insurance. They also use significantly more formal in-home services than their neighbors who live in age-integrated housing. Using a modified version of the Andersen-Newman (1973) behavior model of service utilization, level of need is the strongest predictor of formal service use for both groups. However, even after controlling for all the need, enabling, and predisposing variables, senior housing emerges as a significant predictor of formal in-home service use. Based on this study sample, it seems likely that those residents who choose senior housing will also be users of formal in-home services.

CLIENT PROFILES AND SERVICE CONSUMPTION PATTERNS IN A MEDICAID HOME AND COMMUNITY BASED WAIVER PROGRAM

D. Bagati, J.K. Davitt, & L.W. Kaye, Bryn Mawr Col., Bryn Mawr, PA 19010 & P. Graub, Philadelphia Corp. for Aging, Phila., PA 19130.

The Philadelphia Corp. for Aging operates one of the largest Medicaid home and community based waiver programs in the United States. An analysis of a subsample of 723 clients contributes to an understanding of the relationship between case demographics and service consumption patterns among urban Medicaid waiver beneficiaries.

The majority of clients were female, African American, nearly 80 years of age, with incomes approximately $600. a month. While clients were not hospitalized very frequently, race was associated ($p < .05$) with reason for hospitalization. Younger white clients had higher functional need, more hospitalizations, and used more medications. Clients who were bedbound, Hispanic, and the most dependent in performing ADLs received fewest services. Intellectual intactness was negatively associated with hospitalization and medication taking. The relationships between race/ethnicity, severity of disability, and levels of service consumption are interpreted in the context of operating Medicaid waiver programs.

VICTIMIZATION IN THE LIVES OF ELDERLY INNER-CITY WOMEN: A COMPONENT OF URBAN FEAR SYNDROME?

K.S. Kauffman, J. Geiger Brown, P. Sharps, University of Maryland, 655 West Lombard St., Baltimore, MD 21201

Inner-city criminal violence has escalated to such a level that many people have begun to fear dangers of public spaces, limit socialization outside homes, and exhibit an array of other behaviors contributing to an emerging phenomenon labeled Urban Fear Syndrome (UFS). Little research has focused on the constitution and consequences of such fear, especially among elderly women who are victims of violence and/or fear being victimized and living in neighborhoods known for poverty and dangerous public spaces. Also, little is known about the relationship between having been a victim of intimate violence and the coping of fear of criminal violence in public spaces. To address these questions, an ethnographic pilot study was conducted in Baltimore. Ten women participated in formal interviews and completed the Campbell Violence Questionnaire either in their home, in places with congregate meals, or in public meeting spaces. Inductive analysis of data yielded several themes: economic victimization, failure of institutions, living in the drug culture, living with youths, self-protection strategies, and belief in God. The study demonstrated that UFS is not

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discrete. Rather, women are responding to insidious and pervasive effects of a community that economically victimizes women and culturally sustains a failure of institutions to carry out their missions in poor inner-cities.

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The "Co Pilot Driver Syndrome": 2 Case reports.

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Purpose: Expose a hidden driving pattern of AD patients.We define the"Co-Pilot Driver Syndrome"as a "mutually dependent driving relationship between two individuals".

Case 1: D.A.is a 77 year old man with the diagnosis of AD.He had a past medical history of total blindness in his right eye since age 20,but he had been safely driving over the past 57 years.His most recent Mini-Mental-Status-Examination (MMSE) was 17/30. He had been safely driving with the companionship of his wife for the past 3 years.There were no motor vehicle accidents or moving violations reported over the past 3 years. Their driving is limited to nearby shopping centers and physician offices.

Case 2: W.H is a 72 year old man who was diagnosed with AD 3 years ago. MMSE was 16/30. Brief history revealed he had mild paranoid thoughts and occasional agitation. According to the wife and daughter, he did not recognize any traffic signs, and did not remember locations. His driving is limited to nearby areas, only when his wife accompanied him as a "co-pilot".Patient was in denial of his cognitive status,but stated that he cannot drive without his wife.

CONCLUSION: These two cases reveal that some AD patients drive safely,with the help of a "Co-Pilot".

DAILY RECORD OF BEHAVIOR: A MEASURE OF DEMENTIA SPECIFIC BEHAVIOR PROBLEMS

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Accurate appraisals of behavior problems are necessary to assess dementia severity and caregiver strain. Dementia impacts multiple domains of behavior. The problems which result fluctuate in frequency through the course of the day. Therefore, a comprehensive inventory of behavior problems must encompass a variety of behavioral domains as well as multiple points in time during the day. The Daily Record of Behaviors (DRB) is designed to measure accurately and comprehensively the extent of behavior problems exhibited by older adults with dementia. Caregivers indicate the frequency and duration of behaviors for four periods of the day. Behaviors include eating, bathing, dressing, toileting, mood, memory, reality recognition, and disruptive and positive behaviors. The caregiver also indicates how upsetting the behavior was. In a pilot study, eating, toiieting, and positive behaviors were the most commonly observed. The frequency of behavior problems ranged from 0 to 24 per day, with 58% of the sample experiencing less than 5 problems a day.

ATTITUDES TOWARD PARTICIPATION IN ALZHEIMER'S DISEASE RESEARCH AMONG FAMILY CAREGIVERS.

B. A. Shaw, C. M Connell, S. B. Holmes, & N. L. Foster. Michigan Alzheimer's Disease Research Center (MADRC), University of Michigan, Ann Arbor, MI 48109

To advance our understanding of Alzheimer's Disease (AD), the scientific community relies upon findings that emerge from participation in research. Unfortunately, current levels of participation in AD research are inadequate, particularly among non-whites. The present study was conducted to examine caregivers' attitudes toward their family member's participation in AD research, including the decision making process and their expected and actual experiences. Caregivers also offered suggestions for improving the research process. Six focus group interviews were conducted with 49 caregivers of AD patients seen at the MADRC or its satellite clinics in Detroit and northern Michigan. Major themes expressed by the caregivers included the desire to help their family member and future generations, their belief that their family member received improved care, and their desire to obtain feedback about patient status and research results. In addition, caregivers reported the need to establish trust with the clinical/research team and increase awareness of the benefits of research. Many caregivers found it difficult to distinguish between usual clinical care and the added requirements of research participation. Implications for recruiting and retaining white and non-white subjects in AD research will be discussed.

RACE DIFFERENCES IN KNOWLEDGE AND ATTITUDES ABOUT ALZHEIMER'S DISEASE.

C. M Connell, Michigan Alzheimer's Disease Research Center, 300 North Ingalls Building, University of Michigan, Ann Arbor, MI 48109

Although the public health impact of Alzheimer's disease (AD) has been increasingly recognized, little is known about the public's knowledge of AD, particularly among non-Whites. The present study was conducted to assess knowledge and attitudes about AD among adults in Michigan. Data were collected using telephone interviews of a systematic random sample of 897 Whites and 278 Blacks identified by random digit dialing. Logistic regression and ANCOVA analyses, controlling for age, gender, and educational level, were conducted. Although no race differences were discovered in familiarity with AD, Blacks reported being significantly more concerned about developing AD than Whites (p=.0002). Scores on a 14-item AD knowledge test were significantly higher among Whites (p=.0001), with Blacks more likely to report that memory loss is a normal part of aging and less likely to report that there is no cure for AD (p's < .01). Results also indicated that Blacks were significantly less aware of the prevalence, cost, and progressive nature of the disease than Whites (p's < .001). No race differences were reported in attitudes toward obtaining a diagnosis, disclosing a diagnosis to non-family members, or willingness to participate in AD research. The implications of these findings for the development of information dissemination campaigns will be discussed.

Predictors of Recovery from Major Depression among Geriatric Psychiatry Inpatients: The Importance of Caregivers' Beliefs. R. Casten, Ph.D., B. Rovner, MD, Y. Shmuely-Dulitzki, DSW, R. Pasternak, MD, R. Pelchat, MD, & N. Ranen, MD. Robin Casten, Wills Eye Hospital, Geriatric Psychiatry, 900 Walnut St., Phila., PA 19107

Social support is an important factor in depression recovery. We examined whether caregivers' beliefs about patients' ability to control depressive symptoms were related to depression recovery after controlling for depression treatment (antidepressant dose, ECT), demographic characteristics, number of depressive symptoms, and health. Fifty-one cognitively intact inpatients who met DSM-IV criteria for major depression and who had a primary caregiver comprised the sample. Thirty-three (66%) were Remitted and 18 (34%) were Non-Remitted by the time of discharge. ECT (odds ratio = 8.5), number of depressive symptoms caregivers believed to be within patient control (odds ratio = 1.9), and male gender (odds ratio = 27.02) predicted remission. These findings could reflect poor patient/caregiver relationships, a tendency to "blame the victim", or patient personality styles (i.e., neuroticism). This study highlights the important relationship between family dynamics and recovery from depression.

EFFECTS OF PATIENT AND ENVIRONMENTAL CHARACTERISTICS ON BEHAVIORAL SYMPTOMS OF DEMENTIA D. Fogel, L. Walker, J. Robison, Braceland Center for Mental Health and Aging, Institute of Living/ Hartford Hospital, 400 Washington St. Hartford, CT 06106.

Characterizing the natural history of behavioral symptoms of dementia, as well as understanding the potential role of specific patient characteristics, is essential to improving continuing care of dementia patients. This study is part of a longitudinal project examining behavioral symptoms post discharge from a geropsychiatric hospitalization. 101 of 106 eligible patients were enrolled (95% response rate).

Patient characteristics include: demographics (mean age=78.9; 50% female; mean number of comorbid conditions=4.7), MMSE (mean score 12.2), Cornell Scale for Depression in Dementia (mean score 6.3), BEHAVE-AD (mean score 6.0). Other factors include frequency of transitions and discharge settings. Status of behaviors are as follows: 2 weeks (13% improved, 62% stable, 25% declined), 3 months (14%, 33%, 46%, 7% combination), 6 months (21%, 24%, 53%, 1%). Relationships between patient and environmental characteristics and target behaviors are explored. The data indicate a need for education and support for caregivers to enhance capacity to respond to behavioral symptoms. Supported by the Donaghue Medical Research Foundation.

THE ROLE OF FAMILIAL RELATIONSHIPS ON DEPRESSION AND BURDEN IN DEMENTIA CAREGIVERS, K.M. Cunningham, J.N. Kogan, & E. Rankin, WVU School of Medicine, Morgantown, WV 26506-9124

Studies have shown that the family relationship between caregiver and dementia patient is related to caregiver depression and burden. It is not known, however, if close familial relationships (i.e., spouse, and daughter) predict caregiver depression and burden. A total of 171 dementia caregivers, 74 spouses and 97 daughters, completed a battery of questionnaires including demographics, the Center for Epidemiological Studies Depression Scale (CES-D), and the Zarit Burden Inventory (ZBI). Mean CES-D scores were higher for daughters than spouses (t=5.77, p < .05). Groups did not differ on their level of caregiver burden. Holding patient clinical characteristics and caregiver level of involvement constant, caregiver relationship to patient was a significant predictor of caregiver depression (adj. AR^2 = .04, p < .05). Caregiver relationship to patient was not a significant predictor of caregiver burden. Next, differences between high depressed and low depressed caregivers were examined, using caregiver education, age, gender, length of caregiving, caregiver burden (ZBI), and patients' cognitive status as DVs. High depressed and low depressed caregivers were distinguished using clinical cutoffs of the CES-D. For both spouses and daughters, the high depressed group reported more burden (t = 3.76, p < .01; t = 3.09, p < .01, respectively). No other patient or caregiver characteristics were significant. The role of family relationships in identifying caregivers at risk for depression will be discussed.

STATE LEGISLATION CONCERNING INDIVIDUALS WITH DEMENTIA.
Brian Kaskie, Leonard Davis School of Gerontology, University of Southern California, Los Angeles, CA 90089-0191.

The importance of federal policies directed towards individuals with dementia is well established. Yet, as this political era of New Federalism persists and the responsibilities of regional governments increase, analysis of state

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policy activity remains limited. I compiled the current state legislation concerning individuals with dementia and then chronicled the history and diversity of the statutes. Texas was the first state legislature to pass a law pertinent to the demented population in 1943 and, by the end of the 1997 legislative sessions, 46 of the state codes contained statutes directed specifically to individuals with dementia. The Florida legislature has enacted the greatest diversity of dementia specific legislation, organizing statutes under 11 different titles. This catalog is useful for individuals interested in analyzing or advancing state legislative responses to the problems pertaining to the demented population.

THE CLUES METHOD OF CLINICAL INTERVENTIONS FOR DEMENTIA

V.N.Gang, R.N.,C., C.C.M., Consultants in Care, 3528 Cambridge Avenue, Riverdale, New York 10463.

The theory of clinical interventions for dementia was stimulated by outcomes observed while the author served as a consortium member of the New York City Chapter of Alzheimer's Assoc.- New York State Dept. of Health's grant to train Dementia Specialists (1990-1992). The author continued to train paraprofessionals, observe client response and has developed The Clues Method, a system of clinical interventions to potentiate client capacities: Care: Learning to Understand and Evaluate for Success. In clinical application models, the outcomes consistently demonstrate that client's cognitive and functional capacities exist where not previously observed. Capacities can not only be developed but interwoven with other capacities to permit client function previously assumed "lost" to the dementing illness. The Clues Method does not assume disability and decline are the expectations or the outcomes of dementing illness. The client population in a seven year study demonstrates that client capacities can be identified and supported to achieve maximum independence. The nurse, family and paraprofessional caregiver are taught first to understand the dynamics of dementia and seconly the intervention principles and process of The Clues Method. Nothing succeeds like success as they evaluate the client for cognitive and functional capacity on a daily basis and "cue" the client for success. Tools supporting this process are: 1) daily behavior mapping, 2) client biography, 3) therapeutic calendar, and 4) the client's "wish list". Increased and sustained capacity, prolonged plateaus of stability and optimum quality of life, based on self-determination for the client and family, are the outcomes of the consistently evolving care plan. Three case studies are presented, each with a different underlying diagnosis, to demonstrate the concepts and process of The Clues Method including use of caregiver tools.

SPIRITUALITY-BASED PRACTICE WITH COGNITIVELY IMPAIRED ELDERLY: THE CHALLENGE OF NON-COGNITIVE APPROACHES IN THE CHANGING CONTEXT OF USE OF FAITH IN CARE

W. Crossman, M.S.W. and T. Pastorello, Ph.D., Syracuse University, School of Social Work, Syracuse, New York, 13244.

Given the self-fulfilling and healing value of faith for many elderly, an issue of concern is the adverse affect of cognitive impairment, including Alzheimer's, on the religious person's ability to pray and communicate with God. Do non-cognitive practice approaches allow the patient to re-open a sense of 2-way communication with God? (Adaptive techniques include use of faith symbols, images and metaphors; non-verbal artistic expression; music, including hymns; evocation of emotion-laden religious memories; and comprehensive use of early religious sensory memory, including the gustatory, olfactory and tactile.) What variations are introduced by family support, ethnicity and religious culture, as well as by type of dementia?

Narrative-based information from biography and in-depth interviews with purposively selected practitioners of diverse background were content analyzed to address these research questions. Qualitative data analysis, using artificial intelligence software PROLOG, generates findings which support the value of the authors' working spiritual practice approach – creating meaning in transcendence of socially constructed reality. The deconstruction of socially defined Self, which characterizes some cognitively impaired elderly, can enable the development of a more spiritual sense of Self in wholistic connection with God. With qualifications, non-cognitive approaches can facilitate spiritual expression among the cognitively impaired.

PRAYER, RELIGIOSITY AND PERSONAL MEANING: PREDICTORS OF PSYCHOLOGICAL WELL-BEING.

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Traditional researchers have relied heavily on a stress/coping model to explain negative changes in social-psychological well-being in late life. However, a growing body of research is now attempting to capture well-being within an existential paradigm in which it is argued that personal meaning, religiosity, comfort of prayer and access to pastoral care are more powerful predictors of well-being and life-satisfaction in late life than are previously hypothesized predictors of physical health and financial resources. The findings of the present study revealed the unique and combined contribution of these personal-existential and religious resources as complementary predictive factors to explain positive aspects of aging among a sample of 380 elderly persons drawn from community dwellings and terminal care settings. Prayer, levels of personal meaning and pastoral care account for 20% & 15% of the variance in well-being. In-depth interview data support these results.

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TELLING PATIENTS THE DIAGNOSIS IS ALZHEIMER'S DISEASE

LA Siminoff[1], M Silverman[2], J Saxton[2]. Department of Medicine, Case Western Reserve University, Cleveland, OH 44106[1] and the University of Pittsburgh Graduate School of Public Health and Department of Psychiatry[2].

Whether patients (PTs) in the early stages of Alzheimer's Disease (AD) should be told their diagnosis, and what role they should or can play in their own treatment, has been

debated in the literature although little empirical evidence exists as to what patient preferences are and what role these patients can play in treatment decisions. Many AD patients, especially those with mild to moderate impairment still have decisional capacity. Nonetheless, the impulse toward paternalism on the part of physicians with these patients is especially strong. There are several factors which mitigate against enlisting early stage AD PTs as full partners in their own health care. These include the psychological impact on patients of revealing the diagnosis, the lack of available curative therapy, and the discomfort physicians have telling patients bad news.

This pilot study of AD PTs and their families (FX) focused on how PTs in a AD Research Center were told about their disease and the difficulties of those communications. PTs had mostly mild to moderate stage disease (mean MMSE= 18) mean PT age = 71 yrs. Transcripts revealed that PTs were extremely passive in their communications patterns and that even FX members spoke infrequently. The diagnosis was provided to all and the word AD was used at least once for 90% of the sample but thereafter avoided. Most talk was directed at the FX who received more information than the Pts and were the only ones with whom life planning was discussed. In addition, the progression of AD was not discussed at any length although FX members and PTs stated they wanted more information about this and other issues on 4 month follow-up.

KNOWLEDGE AND ATTITUDES OF EMERGENCY MEDICAL TECHNICIANS TOWARDS ADVANCE DIRECTIVES AND AT HOME DO NOT RESUSCITATE ORDERS

Thomas A. Cavalieri, DO., Lloyd Forman, PhD, Brian Little, Anita Chopra, MD, Department of Medicine & Center for Aging, UMDNJ-School of Osteopathic Medicine, Stratford, NJ 08084

The use of advance directives (AD) and orders to withhold treatment such as the Do Not Resuscitate Order (DNR) have become commonplace. Traditionally, Emergency Medical Technicians (EMTs) have not been expected to abide by ADs or DNR orders. This study assessed the knowledge and attitudes of EMTs toward ADs and DNR orders in the prehospital setting. Using a 56-item questionnaire, 77 randomly selected EMTs from all counties in New Jersey were surveyed. 95% could identify the definition of an AD and 56%, the definition of a DNR order. 85.8% of agencies had no written policies on ADs or DNR orders. 88% agreed with the Patient Self-Determination Act of 1991; 100% agreed with proposed legislation allowing EMTs to follow ADs and DNR orders; 75% stated EMTs do not receive proper education about ADs. 77% reported they would not follow an AD at the request of a family member. 87% ranked ADs as valuable to extremely valuable. 99% ranked ADs and DNR orders as an important ethical issue facing EMTs. This study demonstrates a disparity between the intent of ADs and the accepted practice of EMTs. It points to the need to adopt legislation to clarify EMT roles and education on end of life issues.

MEASURING KNOWLEDGE AND ATTITUDES ABOUT CARE AT THE END OF LIFE: A NEW TOOL

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Many initiatives to improve care at the end of life are now underway. Several initiatives involve changing physicians' knowledge, attitudes, and beliefs about care at the end of life, yet no reliable and validated instrument exists with which to measure attitudes and beliefs regarding this complex topic. The objective of this study was to develop an instrument to be used in evaluative studies concerning end-of-life care.

The instrument includes 15 questions with a 5-point Likert scale for each response. The test-retest reliability of the instrument's components was evaluated using 50 clinician subjects. Most components (n=11) showed good (Kappa=.60-.74) or excellent (Kappa >.75) reliability, with 4 components demonstrating fair reliability (Kappa .52-.58). Three types of validity were assessed: content, construct, and convergent validity. Content validity was displayed by including a range of attitudinal constructs relative to terminal care found in the literature. Construct validity was assessed using confirmatory factor analysis. Items loaded strongly on three unique factors, as predicted a priori. Finally, convergent validity was demonstrated by the correlation of attitudinal items with related knowledge and behaviors such as previous clinical training in hospice care and use of hospice services.

The instrument provides a short and easily administered test of clinicians' attitudes and beliefs about caring for terminally ill patients and their families. The instrument was assessed to be both reliable and valid in measuring such attitudes and beliefs and offers an effective tool to help evaluate initiatives to change physician behaviors concerning care of the dying.

END OF LIFE TREATMENT ISSUES: ETHICS AND THE CERTIFIED NURSING ASSISTANT

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Certified nursing assistants (CNAs) provide the majority of hands-on care to nursing home residents. However, they are often excluded from participation in decisions affecting the care of their residents, particularly around end-of-life treatment issues. Additionally, they generally are not part of educational efforts focusing on ethical issues and end-of-life care. As part of a project to educate CNAs about ethical issues and end-of-life decision-making, 618 CNAs from a random sample of nursing homes in New York and New Jersey completed a questionnaire designed to explore their knowledge and attitudes about these matters. Issues addressed included autonomy, truth-telling, comfort care, and advance directives

Findings suggest that CNAs are only somewhat knowledgeable about the specifics of advance directives, with approximately 60% selecting the correct answers on items related to health care proxies. Feelings about end of life issues varied markedly, with a few notable exceptions. Almost all the CNAs (96.%) said they felt residents have the right to refuse life-sustaining treatment. However, in some

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instances they felt families should be able to overrule residents' stated preferences.

The implications of these data will be discussed, and the educational program developed as a result of our findings will be described.

Supported by The Greenwall Foundation

PHYSICIAN PERCEPTIONS OF PHYSICIAN ASSISTED SUICIDE: THE INFLUENCE OF VALUES, ATTITUDES, AND RELIGION

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The Supreme Court has relegated the escalating public discourse regarding the legality of physician assisted suicide (PAS) to the states. Despite vigorous debate about rights and responsibilities of physicians, empirical research on the potential influence of values and beliefs is limited.

The dataset consisted of 397 surveys from 1,920 licensed physicians randomly chosen from the following three domains: psychiatry, internal medicine, family practice (response rate=20.4%). Average years of practice was 22±13. Respondents were predominately male (70%), Jewish (29%), and white (91%).

A series of questions ascertained information regarding personal views on PAS. Responses shifted dramatically among physician's role at the end of life. Whereas 64% strongly agree in withholding or withdrawing life-sustaining treatment, only 9.3% would prescribe a lethal dose, and 7.4% would strongly agree to administering a medication whose purpose was to end a patients life. Ordered logit was used to identify predictors of these personal views. Religion ($p<.001$), years of practice ($p<.01$) and professional discipline ($p<.01$) were indpendent predictors on all 5 response items.

These results, as well as factor analysis data from several of the subscales will be discussed. This study raises important questions about the role of physician values and perceptions regarding PAS.

ETHICS DECISION-MAKING IN A CATHOLIC MEDICAL CENTER

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The operation of healthcare institutions is influenced by federal and state laws and regulations and by accrediting standards. In addition, sectarian institutions are affected by Church teachings on moral and medical matters. The research question for this study is: to what extent and in what ways are the activities of the Ethics Committee of a Catholic medical center affected by the ethical and religious directives of the Catholic Church? The study is based on three years of participant observation of one such committee, on which the author served as an outside, lay member. The committee's activities included staff and community education; policy development; and ethics consultation. Much of its work dealt with end-of-life issues. This study will present information on the nature and composition of the committee itself and on the relationship between its activities and the ethical and religious directives of the Church with regard to healthcare institutions.

ASSISTED SUICIDE: NOW A CRITICAL STATE ISSUE

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In 1996, two U.S. Circuit Courts found that New York and Washington state laws against assisted suicide violated the 14th. Amendment, and hence were unconstitutional. Both Circuit Court decisions were appealed to the U.S. Supreme Court. In June 1997, the Supreme Court unanimously reversed the lower court decisions. The Supreme Court held that there was no constitutional right to physician aid in dying. However, the Court left the door open to state legislation permitting this practice. In November 1997, Oregon voters reaffirmed an earlier vote in support of the state's Death with Dignity law. Oregon thus became the first state to legalize assisted suicide. This paper reviews post-Supreme Court decisions in Oregon and other states. It examines the political, legal and ethical issues surrounding such legislation, as well as public opinion data and special interest group lobbying. As of the Spring of 1998, assisted suicide was a crime in 43 states, but not criminalized in 6 other states. Legislative action is pending in several areas, and the issue is very much "alive" at the state level!

CAREGIVERS' EXPERIENCE AND KNOWLEDGE OF ADVANCE DIRECTIVES WITH THEIR OLDER RELATIVES

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While older adults express the need for legislation on advance directives and expect caregivers to make their health care decisions, the research shows that the actual use of advance directives is markedly low. Although there has been a concentrated effort to assess the needs and beliefs of the elderly regarding end-of-life care, there continues to be a lack of research on the caregiver's role in end-of-life care decision-making. For this reason, the New York City Department of the Aging conducted a pilot study to assess caregivers' perspectives on making medical decisions for their relatives or friends. Questionnaires were mailed and distributed to more than 200 caregivers. The questionnaire was designed to assess caregivers' knowledge of advance directives, their comfort level with making health care decisions, and interaction with professionals. Preliminary results indicate that most caregivers do not fully understand advance directives. Furthermore, most caregivers do not feel comfortable discussing advance directives and end-of-life care with their relatives or friends. In general, caregivers are more comfortable relying on physicians to make end-of-life care decisions. Demographic profiles and study implications will be discussed.

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THE STUDY OF WOMEN'S HEALTH ACROSS THE NATION: EARLY RESULTS FROM A MULTI-ETHNIC COHORT STUDY.

Organizer: J. Bradsher, New England Research Institutes, 9 Galen St., Watertown, MA 02172.

Participants:

J. Bradsher (NERI, Watertown, MA) and S. Crawford (NERI, Watertown, MA), Study of Women's Health Across the Nation: Overview of the Design.

S. Harlow (Univ. of Mich., Ann Arbor, MI), N. Santoro (UMDNJ, Newark, NJ) , J. Randolph (Univ. of Mich., Ann Arbor, MI), and M.F. Sowers (Univ. of Mich., Ann Arbor, MI), Ovarian Aging In A Multi-Ethnic Cohort Of Mid-Life Women.

E. Gold (UC Davis, Davis, CA), N. Avis (NERI, Watertown, MA), B. Sternfeld (Kaiser Permanente, Oakland, CA), and J. Skurnick (UMDNJ, Newark, NJ) for the SWAN Research Group. Risk Factors and Symptoms of Menopause in a Multi-Ethnic Cohort of Women.

K. Matthews (Univ. of Pitt., Pittsburgh, PA), R. Pasternak (MGH, Boston, MA), L. Powell (Rush-Presbyterian, Chicago, IL) and S. McKinlay (NER, Watertown, MA) for the SWAN Research Group., Cardiovascular Disease Risk Factors in Women at Mid-Life.

J. Finkelstein (MGH, Boston, MA), M.F. Sowers (Univ. of Mich., Ann Arbor, MI), R. Neer (MGH, Boston, MA), and J. Cauley (Univ. of Pitt., Pittsburgh, PA) for the SWAN Research Group. Changes in Bone Mass, Bone Turnover, and Body Composition in Mid-Life Women.

Discussant: S. McKinlay (NERI, Watertown, MA).

This symposium presents preliminary results from The Study of Women's Health Across the Nation (SWAN), which was funded in September, 1994 by the National Institute on Aging with support from the National Institute for Nursing Research and the Office of Research on Women's Health. SWAN is a multi-site study of the biological, psychosocial, and cultural factors that influence the health of women of diverse ethnicities as they age and transition through the menopause. The study includes seven clinical sites (in California, Illinois, Massachusetts, Michigan, New Jersey, and Pennsylvania), two central labs, and a coordinating center. Five racial/ethnic groups are targeted: African-American, Chinese-American, Japanese-American, Hispanic American, and Caucasian. SWAN is designed in three phases: focus groups, a cross-sectional survey, and a prospective cohort study. This symposium presents results from the cross-sectional survey (n=16,000) and early findings from the cohort study (N=3,150). The symposium first describes the design and methodology of the study, focusing on the longitudinal cohort study. We will then present early findings in four research areas: ovarian aging, risk factors and symptoms during the menopause transition, cardiovascular risk in mid-life women, and bone mineral density and body composition among women at mid-life.

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ETHICS EDUCATION FOR GERIATRIC INTERDISCIPLINARY TEAMS: THE GITT EXPERIENCE

E.R. Chichin, Mount Sinai Partnership Geriatrics Interdisciplinary Team Training (GITT) Program/The Jewish Home and Hospital, 120 W. 106th St. New York, NY 10025, and M. Luptak, Department of Family Practice and Community Health, University of Minnesota, 201 Stadium Village Mall, 825 Wash. Ave. SE, Box 25, Minneapolis, MN 55414

Participants:

E. Kotthoff-Burrell, (University of Colorado Health Sciences Center GITT, Denver, CO 80262) Professional Codes of Ethics: Discipline-Specific and Interdisciplinary Perspectives.

K. Hyer (GITT Resource Center, New York University, NY 10012) Ethics: A Challenge for Interdisciplinary Teams.

R. Burck (Rush-Presbyterian- St. Luke's Medical Center GITT, Chicago, IL 60612) Educating Interdisciplinary Professionals: Ethical Challenges.

S.Kornblatt (On Lok GITT, San Francisco, CA 94109) Ethics at the On Lok GITT.

E. Olson, E.R. Chichin., (Mount Sinai Partnership GITT/The Jewish Home and Hospital, New York, NY 10025) The GITT Ethics Enhancement.

Discussants:

C.K.Cassel (Mount Sinai Partnership GITT/Mount Sinai School of Medicine, New York, NY 10019)

C.Langston (The John A. Hartford Foundation, New York, NY 10022)

M. Mezey (GITT Resource Center, New York University, New York, NY 10012)

The John A. Hartford Foundation is funding a national initiative to train future health care professionals to work in teams caring for older persons. A key concern at all of the sites participating in this geriatric interdisciplinary team training (GITT) project is the array of ethical issues associated with care of the elderly, as well as team-related issues in the delivery of health care. This symposium describes the ethical challenges interdisciplinary teams face in providing care to older persons, and some of the mechanisms developed through the GITT to address these issues within the hospital, the nursing home, and the community.

The implications of these techniques for discipline-specific and interdisciplinary gerontological education and practice will be discussed.

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MEASURING: GITT (GERIATRIC INTERDISCIPLINARY TEAM TRAINING)

T. Fulmer, RN, PhD, FAAN, Chair, GITT Resource Center, New York University, 429 Shimkin Hall, 50 West 4th Street, New York, NY 10012-1165.

PARTICIPANTS:

R. Kane, MD, (University of Minnesota, School of Public Health, Minneapolis, MN), E. Flaherty, (GITT Resource Center, New York, NY) Scoring Case Studies to Measure Knowledge on Aging.

K. Hyer, DrPA, MPP, T. Fulmer, RN, PhD, FAAN, (GITT Resource Center, New York, NY)

Scoring Video Tapes to Measure Knowledge of Teaming.

S. Fairchild, MPH (GITT Resource Center, New York, NY) Managing a Database for Measuring Teams.

N. Wilson, LMSW, (Baylor College of Medicine, Houston, TX) N. Whitelaw, PhD (Henry Ford Health System, Detroit, MI) Integrating Data Collection into Training: Challenges and Strategies.

J. C. Frank, M. S. Nitta, and D. B. Reuben, (UCLA School of Medicine, Los Angeles, CA) National Program Evaluation of Gitt: Conceptual Model and Cluster Analysis Approach

DISCUSSANTS:

I. Abraham, RN, PhD, FAAN (Epsilon Group, Charlottesville, VA)

N. Henderson, PhD (University of South Florida, College of Public Health, Tampa, FL)

The John A. Hartford Foundation Geriatric Interdisciplinary Team Training Project has been in progress since 1995. Since its inception, a set of core measures have been under development in order to discern changes in attitudes, knowledge of teams and knowledge of training. This symposium will review the approach that has been taken to measure GITT, describe the components of measuring GITT, and discuss each specific aspect for the purpose of measuring GITT. To date we have enrolled over 300 of students with a goal of 2000 by the end of the project.(1)

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STRENGTH AND LEAN MASS IN ACTIVE ELDERLY WOMEN

R Schwartz, C Basso, DM Buchner, GR Merriam, Departments of Medicine/Community Medicine, University of Washington, Seattle WA 98195

Aging is associated to reduction in muscle strength, lean body mass. While older studies suggest that the decline in strength is dependent solely on the decrement in muscle or lean body mass with aging, newer studies suggest a more specific age-related decline in strength. The purpose of our study was to evaluate the relationship between aging, muscle strength, and lean mass (LM) in 68 health untrained older women aged 69.2 ± 5.9 (60-84 years), taking no medications. Muscle strength was measured by isokinetic dynamometer and body composition by DEXA. We found that age was inversely related to quadriceps strength (Q; $r = -.47$) and hamstring (H; $r = -36$) strength but there was no correlation between age and lower extremity, axial or total LM ($r = -.22$) in this population. Age was, however, inversely related to truncal LM ($r = -.25$). Multiple regression analysis revealed that Q was independently related to total LM and age ($r = .63$) while H was related only to trunk lean mass ($r = .61$). Age was also a significant predictor of upper extremity strength. We conclude that in older women there is an age-specific component to muscle strength independent of LM. Moreover, the data suggests that the H muscles, involved in normal walking, may be protected from this age-related loss of strength.

DETERMINANTS OF PEAK VO_2 IN PERIPHERAL ARTERIAL OCCLUSIVE DISEASE PATIENTS.

A.S. Ryan, L.I. Katzel, A.Yataco, A.P.Goldberg, A.W.Gardner. Department of Medicine, U of Maryland, Baltimore, MD 21201.

Peripheral arterial occlusive disease (PAOD) patients with intermittent claudication are functionally limited and deconditioned. We determined whether peak aerobic capacity (VO_2 peak) was associated with PAOD severity, muscle mass, or both in 101 PAOD patients aged 67 ± 8 years (mean ± SD). VO_2 peak (1.1 ± 0.3 l/min) was determined by a progressive graded treadmill test until maximal claudication pain. Percent body fat (30 ± 8%), fat-free mass (FFM, 58 ± 9 kg), leg FFM (17 ± 3 kg), and appendicular skeletal mass (24 ± 4 kg) were assessed by dual-energy x-ray absorptiometry. VO_2 peak correlated with leg FFM ($r=0.44$), appendicular skeletal mass ($r=0.42$) and total FFM ($r=0.40$, all $P<0.0001$). Ankle/brachial index (ABI, 0.64 ± 0.19) correlated with VO_2 peak ($r=0.39$, $P<0.0001$). In multiple regression analyses, both leg FFM ($r=0.44$) and ABI ($r=0.55$) were independent predictors of VO_2 peak and explained 30% of the variance ($P<0.0005$). In conclusion, muscle mass and PAOD severity are important determinants of physical performance in older patients with PAOD.

PREDICTORS OF PHYSICAL ACTIVITY CHANGE IN OLDER ADULTS (CHAMPS II): PRELIMINARY RESULTS

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Factors associated with natural changes in physical activity include age, gender, socioeconomic status, and health. Little is known regarding how these factors predict changes in physical activity among older adults during physical activity promotion interventions, and even less is known regarding mutable predictors. CHAMPS II was a 1-year randomized trial to encourage underactive Medicare HMO members to participate in moderate-intensity physical activities offered through community or home-based settings. These analyses are based on the intervention group only (N=81). Age ranged from 65-90 years (M=74), 69% were female, and 9% were racial/ethnic minorities. Multiple linear regression was used to determine predictors of change in physical activity during this 1-year intervention. Physical activity was defined as: (a) frequency/week taking part in physical activity; and (b) kilo-calories expended/week in physical activity ($r=.53$). Variables tested included age, gender, and health; mutable factors included interest in health topics, knowledge of exercise, activity format preference, stage of change, previous attendance at the clinic, self-efficacy to exercise, self-efficacy to exercsie despite barriers, MD recommendation to exercise, support for exercise, and transportation difficulties. Significant predictors of increased exercise frequency and increased caloric expenditure included having a physician recommend exercise, having fewer transportation difficulties, having less self-efficacy to exercise, and having less social support for exercise (p values < .05). Findings suggest the value of physician counseling for exercise. Persons with less support and efficacy may have been more responsive to the program support. Subgroups of older adults who are least likely to change can be identified for targeting to facilitate such changes. (NIA grant AG09931)

PREDICTORS OF PHYICAL FUNCTIONAL PERFORMANCE (PFP) IN HEALTHY OLDER WOMEN

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The PFP is a continuously-scaled measure of whole body physical performance, which has been validated for use in older subjects. Our purpose in this study was to evaluate the relationships between PFP and the physiologic measures of body composition, muscle-strength and endurance in 63 healthy, untrained older women aged 69.7 ± 5.5 (60-83 years) taking no medications. Body composition was measured by DEXA, muscle strength by isokinetic dynamometer and endurance by aerobic capacity (VO_2max). In this study we found the PFP total score was significantly related to: 1) age (r= -.32); 2) strength of the hamstrings (r= .49), quadriceps (r= .32), triceps (r= .56), biceps (r= .42), plantar-flexors (r= .46), dorsi-flexors (r= .26); and 3) the lean mass of the arms (r= .37) and trunk (r= .31). PFP was not significantly related to lower extremity or total lean mass, any measure of fat mass or VO_2max. In addition, the PFP score was not related to insulin-like growth factor-I. Multiple regression analysis showed PFP was independently related only to triceps strength in this population. We conclude that physical function in healthy elderly women is more closely related to upper body strength than to lower body strength, endurance, body composition or age.

MAXIMUM ATTAINABLE AEROBIC POWER IS AN IMPORTANT COMPONENT OF FRAILTY IN OLDER WOMEN

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The aim of this study was to examine the relationship between maximal attainable aerobic power (VO_{2peak}) and physical performance in older women with mild to moderate physical frailty. One hundred one older women (mean age=82±4yrs.) performed a graded exercise stress test, a modified Physical Performance Test (modified PPT), and questionairres about activities of daily living (ADLs). Simple regression analysis demonstrated that VO_{2peak} was associated with total PPT score ($r=0.52$, $p<0.001$), gait speed ($r=0.44$, $p<0.001$), time to arise from chair 5 times ($r=0.43$, $p<0.001$), and time to climb one flight of stairs ($r=0.36$, $p=0.007$). Multiple regression analysis revealed that the relationship between VO_{2peak} and total modified PPT score and individual PPT items was independent of age. Maximal aerobic power is a significant independent predictor of physical performance, and an important component of physical frailty in this population.

Supported by Claude Pepper OAIC AG13629

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PREDICTING SURVIVAL IN ELDERLY NURSING HOME (NH) RESIDENTS: A MULTIVARIATE MODEL THAT INCLUDES ECONOMIC STATUS.

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Life expectancy in an NH facility dictates medical care. In a previous study we developed a model that predicts survival of an NH resident from any random day. The following were significant predictors of life expectancy: age; sex; degree of impairment of the cardiac, respiratory, neurological, endocrine-metabolic systems; and a summary ADL index. Data abstracted for that study suggested that survival was inversely related to the amount of monthly Social Security income. The aim of the present study was to further explore this relationship. We now present a revised proportional hazards model that is based on our retrospective cohort study. Participants had resided at the Bronx site of the Jewish Home and Hospital from 1/1/86 through 7/1/86 (n=584). The follow-up period was from 7/1/86 through 7/1/96. Amounts of monthly Social Security and pension payments as 7/1/86 were abstracted from the residents Social Services records, and merged with the medical record data used to derive our initial multivariate model. Our revised mathematical model shows that survival is indeed inversely related to socioeconomic status (SES),i.e., survival from 7/1/86 was longest for those in the lowest SES category, followed by those in the middle group, and was shortest for residents in the highest SES category (log likelihood chi-square=66.083; P<0.0001). This model can help formulate public health policies for NH residents.

LIFE THREATENING BEHAVIOURS IN SYDNEY NURSING HOME RESIDENTS

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Depressive symptoms and suicidal ideation are common in nursing home residents, yet suicide rates are no higher than in the general elderly population. It has been hypothesised, that due to lack of access to other methods, nursing home residents are more likely to utilise indirect methods of self harm which may not be recognised as suicidal. The purpose of this study was to determine the prevalence of life threatening behaviours, and their relationship to depressive symptoms, in nursing home

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residents. The sample comprised 622 residents from 11 nursing homes in eastern Sydney. The Life Threatening Behaviour Scale (LHBS), a 23 item observer rating scale devised for this study, was independently completed on each resident by morning and evening shift nursing staff. In addition, residents who were sufficiently competent (n = 358, 56.2%) were interviewed and completed the eight item Even Briefer Assessment Scale for Depression (EBAS-Dep) and the suicide item from the Hamilton Rating Scale for Depression. On the EBAS-Dep, 44.7% (n = 160) had significant depressive symptoms (scores of 3 or more). Ten residents (2.8%) reported suicidal ideas in the previous week, 17 (4.8%) wished they were dead and 65 (18.4%) felt life was not worth living. There was no relationship between EBAS-Dep scores and the Hamilton suicide item. Preliminary results on the LHBS show that 52.6% of residents were observed to engage in harmful behaviours. Only two LHBS items (refusal to eat/drink and verbal suicide expression) correlated with depressive symptoms on the EBAS-Dep. Five LHBS items (eating foreign objects/drinking toxic liquids, refusal to take medication, refusal to participate in social activities, exposing self to hazards and verbal suicide expression) correlated with the Hamilton suicide item. These preliminary results suggest that there may be an association between some indirect life threatening behaviors, suicidal ideation and depressive symptoms

THE INCIDENCE OF OSTEOPOROSIS IN A MALE NURSING HOME POPULATION

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Objective: Osteoporosis is recognized as a major geriatric health problem. This observational study reviewed the prevalence of bone mineral loss by dual energy x-ray absorbtiometry (DEXA) in a male nursing home population (NH). These patients had a history of either falling, or were at greater risk for falling with subsequent fractures.

Results: Bone mineral densities (BMD) (grams/cm2) were determined by (DEXA). The mean value for the right hip is 1.80 (0.18-4.91) standard deviations below the mean for healthy young adults (T value). 17 patients were categorized as osteopenic (43%). 13 patients were categorized as osteoporotic (33%) based on these T values. Of the 39 patients (ages 50-85, mean 74), 25% had dementia, and 28% had schizophrenia as the leading diagnoses. 35% of the patients had a significant history of smoking and 10% had COPD. FSH levels averaged 18 MIU/ml and ranged from 3.2-62.8 MIU/ml (0.9–15MIU/ml NL). LH averaged 9 MIU/ml and ranged from 0.5-25.1MIU/ml (1.3–13 MIU/ml). Prolactin averaged 26 ng/ml and ranged from 3–69.6 (3.4 -31ng/ml NL). Albumin averaged 4 g/dL and ranged 3-4.4 (3.5-5.5 g/dL NL). 32 patients (82%).had low serum total testosterone levels, which ranged from 0.22-3.7 ng/ml (mean 1.9, 3-10 NL). 21 patients were taking antipsychotic medications (53%).

Conclusions The overall benefit and cost of mass screening in the male geriatric population is controversial, however, this preliminary study reveals that the incidence of osteopenia and osteoporosis in this population may actually be higher than in the general male geriatric population. This finding may result from a combination of factors such as hypogonadism, psychiatric medication, smoking, nutrition and immoblity. Further studies on the causes and the treatment of osteopenia/osteoporosis in this population is warranted.

PREDICTORS OF MORTALITY AMONG ALZHEIMER'S DISEASE PATIENTS LIVING IN LONG-TERM CARE

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Life expectancy of Alzheimer's disease (AD) patients is shorter than that of age- and gender-matched subjects. Yet, studies of factors that might affect survival of AD patients are limited. This study examined the predictors of mortality among 9,264 AD patients aged 65+ years. Data were from the SAGE database which includes 350+ clinical items (collected with the Minimum Data Set) on all residents admitted to ~1,500 facilities in 5 U.S. states, between 1992-1995. Data on death was determined via linkage with Medicare claims files. Predictors of mortality were identified by constructing Cox proportional hazard models. Patients had a mean age of 82.1±6.8 years, were more commonly females (69%) and Caucasian (91%). Over 1/3 of the patients had severe cognitive impairment, 40% had a DNR order. During a mean follow-up of 23 months (range 1-58), 4631 deaths occurred; 1-yr mortality rate was 25.7%. After adjusting for all potential confounders, age 85+ (RR 1.83), female gender (RR 1.81), impaired physical function (RR 1.45), indicators of delirium (RR 1.17), depression (RR 1.11), presence of pressure sores (RR 1.24), and a BMI <21 Kg/m^2 (RR 1.31) were independently associated with an increased risk. In the analysis stratified by baseline cognitive function, the associations were stronger among more impaired patients. Gender-related differences were evident. Living in a AD-special care unit did not affect mortality (RR 0.98). Predictors of mortality in AD patients differ depending on age, gender and dementia severity.

SURVEY OF NY STATE NURSING HOMES: STAFFING PATTERNS AND CARE CORRELATES.

G. Eggert, P. Katz, J. Karuza, J. Zimmer, N. Watson, & R. Goldstein, Monroe County Long Term Care, University of Rochester. East Rochester, NY

A state-wide survey was conducted of all NY state nursing facilities (n = 314, response rate = 60%+) to determine the current medical and nursing staffing patterns, penetration of managed care and extent of sub acute care. In addition, care correlates of the staffing patterns were explored. Forty percent of the homes reported having closed medical staffs. The mean medical coverage per week was 36.6 hours (st dev. 45.5). Physicians were on site daily in 42% of facilities, In 55% of the facilities physicians reported providing cross coverage. RN FTE was 20.2, LPN FTE was 22.3, and Nursing Aides FTE was 72.75. Twenty one percent of facilities used nurse practitioners (32.9 hours per week), and 13% used physician assistants (46.8 hours per week). One-quarter of the facilities had a managed care contract, with an average of 4.14 residents. Forty five percent of facilities provide sub-acute care, with an average of 21 patients. Seventeen percent of the homes have a contractual arrangement with a hospital and 34% have a contractual arrangement with managed care. The extent of medical services available on site, having an MD on site daily, and MD, RN, LPN, and NA FTEs were most strongly predicted by the number of hours of medical coverage per week, presence of a closed staff, and the n of beds in the facility (rs ranged from .94 to .15, all $p < .05$ two tailed test). RUGs II case mix scores, presence of managed care contracts or involvement in managed care were unrelated to the care correlates, or FTEs. Results present the current picture of NYS nursing facilities and suggest that the number hours of medical coverage per week may be an important marker for the intensity and quality of care provided.

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ELDERS AND THE CRIMINAL JUSTICE SYSTEM: A REFLECTION OF THE PERCEPTION OF OLDER PERSONS IN U.S. SOCIETY

Max B. Rothman, Southeast Florida Center on Aging, Florida International University, North Campus, Rm. AC1-384, N. Miami, FL 33181.

J.I. Kosberg, School of Social Work, Florida International University, N. Miami, FL 33181. Older Victims of Crime, Abuse, Negligence and Exploitation.

B.D. Dunlop, Southeast Florida Center on Aging, Florida International University, North Campus, Rm. AC1-384, N. Miami, FL 33181. Perceptions of Older Persons and Their Effects on Criminal Justice.

J.J. Kerbs, School of Social Work, University of Michigan, Ann Arbor, MI 48104. Older Prisoners and the Issue of Early Release.

W.A. Achenbaum, Department of History, University of Michigan, Ann Arbor, MI 48104. Elders and the Criminal Justice system in Historical Perspective.

N.N. Dubler, Division of Bioethics, Montefiore Medical Center, Bronx, NY 10467. Discussant.

Older persons have many potential points of contact with the criminal justice system. They may interact with police as traffic violators, witnesses, victims, or even perpetrators of crime, etc. They may enter the courtroom as jurors, witnesses, defendants, victims, attorneys or judges. If convicted, older persons may spend time in prison; or younger persons sentenced for serious crimes may grow old and frail in prison. In some cases, they may be released before their sentence is completed because they are seriously ill or frail, or because the space they occupy is needed for younger, "more dangerous" criminals. At that point, they may have great difficulty re-integrating into civilian society, especially when they have few if any remaining ties in the community.

The manner in which older persons in society are viewed can significantly affect the nature of their experiences in any of these situations, e.g., whether or not they are arrested or charged with a crime in the first place, and if adjudicated, the nature of the sentence they receive, or the degree to which their testimony as a witness is considered reliable by the judge and jury. The competency of the older judge or attorney may be questioned as well. In fact, the judge may not be allowed to preside if he or she is past age 70. Symposium participants will cover major aspects of elders' interaction with the criminal justice system within the contexts of changing perceptions of older persons, rapidly expanding potential for contact with the criminal justice system, and heightened ethical awareness.

In closing, the chair and discussant will outline public policy issues, e.g., Should there be Elder Courts similar to Juvenile Courts?, and training implications as well as ethical considerations for policymakers and those who will be working with elders in the criminal justice system in the new millennium.

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ASSISTING CAREGIVING FAMILIES: CHALLENGES AND NEW TREATMENTS

C. Eisdorfer, S. Czaja, University of Miami School of Medicine, 1425 N.W. 10th Ave., Miami, Fl. 33136

Participants:
C. Eisdorfer & M. Rubert (University of Miami School of Medicine) Caregiving and the 21st Century
S. Argüelles & D. Loewenstein (University of Miami School of Medicine) Caregiver Perceptions of Functional Abilities of Family Members with Alzheimer's Disease
V. Mitrani & J. Szapocznik (University of Miami School of Medicine) The Role of the Family in Preventing Caregiver Depression
S. Czaja & M. Rubert (University of Miami School of Medicine) The Emerging Role of Technology Interventions
T. Argüelles & D. Loewenstein (University of Miami School of Medicine) Challenges in Recruiting Families into Intervention Programs
Discussant:
R. Schulz (University Center for Social and Urban Research, University of Pittsburgh, PA 15260)

By the year 2040 it is estimated that there will be approximately 10 million people with Alzheimer's disease and related dementias. Family members provide most of the care for relatives with dementia and while there are positive elements in caregiving the negative consequences associated with family caregiving are well documented. The level of family distress is mediated by a variety of factors including: accessibility and efficacy of intervention programs, availability of family support, family belief systems, cultural and ethnic factors, and knowledge of the caregiver about the disease. Thus assisting family members with caregiving is a complex problem and involves a multifaceted approach. This symposium will discuss current challenges in caregiving and recent developments in treatment interventions. Examples will be provided from on-going research projects at the University of Miami. Issues which will be addressed include: ethnic and cultural influences on the use of caregiving programs, the impact of caregiver belief systems on patient care, and the potential of family therapy and computer technology as intervention programs.

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CULTURAL AND SOCIAL SOURCES OF PSYCHOLOGICAL WELL-BEING IN THE ELDERLY A. Glicksman & M. Kleban, Phila. Geriatric Center (PGC), 5301 Old York Road, Phila PA

Participants:

A. Glicksman & C. Marian (PGC) "...My Heart Is Beating Wildly - I Cannot Keep Silent" Ethnic Heritage & Expressive Style.

E. Becton & W. Brown Glaude (PGC & Temple University) Ethnic Self-Identity and the Impact of the Civil Rights Movement of the 1960's on Older African-American Respondents.

A. Iglewicz (PGC & New College of the University of South Florida) Cross-Cultural And Cross-National Use Of The Phila Geriatric Center Morale Scale.

T. Koropeckyj-Cox (PGC & the University of Pennsylvania) Religious and Cultural Dimensions of Depression: Issues of Measurement and Interpretation in the CES-D.

S. Shevchenko (PGC) Asking Questions about Friends and Family: Measuring Relationships among Older Ukrainians.

Discussant:

M. Powell Lawton (PGC)

Most research on the sources of psychological well being (PWB) among elders has been focused on the role of three domains: 1) physical health status, 2) socio-economic status, and 3) positive social interactions with family and friends. These domains are selected because prior research has shown them to be the most important predictors of scores on scales designed to measure PWB. At the same time, consistent differences in scale scores have been shown between ethnic and racial groups. Such differences have also been demonstrated to predict SWB scale scores independently of the three domains already listed. This leaves us with the question of why racial and ethnic differences should be independent predictors of such scores. Two possibilities exist - first that there is some aspect of the experience of such groups, facing discrimination for example, that has an impact on their collective SWB. The other possibility is that cultures teach different styles of talking about feelings, and that these styles influence the answers to the types of questions that appear on standard scales of SWB. The correct answer is important because it will affect the appropriate use of such scales in both research and clinical work.

The papers in this symposium are all reporting results from a study designed to explore these issues. Older (62+) members of four different ethnic groups (American Jews (n=100), Ukrainian Catholics (n=50), Anglo Presbyterians (n=55) and African American Baptists (n=75)) were interviewed. Each sample was evenly divided between women and men. Three standard scales designed to measure well being and mental health (The PGC Morale Scale, The PGC Affect Scale, and the Center for Epidemiological Studies Depression Scale) were administered in their traditional close ended format and then answers to selected questions on each of the scales were probed in an open ended format. In addition, one author (Iglewicz) used the PGC Morale Scale among a group of older Jews in Australia (n=20). By examining measurement issues (Iglewicz, Koropeckyj-Cox, Glicksman) and specific ethnic groups (Becton & Brown Glaude, Shevchenko) we will be able to explore the relation between cultural heritage and response patterns on these scales. This research is supported by NIA Grant #10264.

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THE INDIVIDUAL'S ADULT DEVELOPMENT
R. Helson, Institute of Personality and Social Research, University of California, Berkeley, CA 94720-5050.

Participants:

C.L. Bradley (Institute of Personality and Social Research, Berkeley) Generativity Status: Do Q-Sort Prototypes Work?

S. Srivastava & R. Helson (Institute of Personality and Social Research, Berkeley) Individual Differences Associated With Patterns of Environmental Mastery and Sense of Personal Growth.

R. Paris & C.L. Bradley (Institute of Personality and Social Research, Berkeley). The Challenge of Adversity: Themes of Adult Development in Three Narratives of Late Middle Age.

P. Wink (Department of Psychology, Wellesley College, Wellesley) Two Types of Ego Integrity and Their Antecedents.

Discussant:

A.J. Stewart (Department of Psychology, University of Michigan, Ann Arbor)

Papers treat the conceptualization, measurement, and appraisal of individual differences in development in middle and late adulthood, several using data from the Mills Longitudinal Study. Bradley discusses differences in degree and type of success (statuses) in the development of generativity, the measurement of these statuses by means of interview and now by Q-sort prototype, and how results compare. Srivastava and Helson use Ryff scales for Environmental Mastery and Sense of Personal Growth to explore the idea that success along multiple lines of adult development may be not so much better than as different from success along one line but not another. Paris and Bradley use individual narrative material from three women to discuss ways of achieving and failing at developmental tasks despite adversity. Wink found discrepancies between Erikson's conception of integrity and current findings with participants in the IHD longitudinal studies. He describes two kinds of integrity with different antecedents.

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COGNITIVE FUNCTIONING AMONG OLDER ADULTS: NEW INSIGHTS
M.B. Ofstedal, Population Studies Center, Univ. of Michigan, 1225 S. University Ave., Ann Arbor, MI 48104

Session Chair:

A.R. Herzog (Institute for Social Research, Univ. of Michigan, Ann Arbor, MI 48106)

Participants:

M.B. Ofstedal & A.R. Herzog (Univ. of Michigan) Factors Associated with Change in Cognitive Functioning Among the Oldest-Old

C.S. Blaum (Institute of Gerontology and Internal Medicine Dept., Univ. of Michigan) Cognitive Performance Modifies the Relationship Between Some Chronic Diseases and ADL/IADL Disability

L.A. Wray & J.W. Lynch (Institute for Social Research, Univ. of Michigan) The Role of Cognitive Ability in Links Between Disease Severity and Daily Functioning Among Middle-Aged Adults

Z.S. Zimmer, M.B. Ofstedal & M.C. Chang (Dept. of Sociology, Univ. of Nevada-Las Vegas, 89154) The Effect of Cognitive Impairment on Utilization of Formal and Informal Care Services among Elderly in Taiwan

Discussant:

R. B. Wallace (Department of Preventive Medicine, University of Iowa, Iowa City, IA 52242)

Cognitive impairment is one of the most devastating conditions of old age, and one that has tremendous consequences for the ability of persons to function independently in the community. There is general agreement in the literature that cognitive functioning declines fairly rapidly after age 70, and some studies estimate that as many as 45% of persons age 85 years and over are severely impaired or demented. As more and more people live into their 80s and beyond, cognitive impairment will become an increasingly important personal and public health care concern in the United States and worldwide. Hence, gaining a better understanding of the risk factors that are associated with cognitive impairment and its consequences for the lives of those affected is an important research objective.

Previous research on cognition has been based largely on non-representative samples and small numbers of cases. This symposium will showcase findings from a new set of studies based on three national panel surveys: 1) Asset and Health DynamicsAmong the Oldest-Old (age 70+) in the United States, 2) Health and Retirement Study of persons age 51 to 61 in the United States, and 3) Survey of Health and Living Status of the Elderly (age 60+) in Taiwan. Using a mix of cross-sectional and longitudinal approaches, the first three papers focus on the factors that are associated with change in cognitive functioning and the way in which cognitive performance mediates the association between disease and disability among the near-elderly and elderly in the United States. The fourth paper utilizes comparable data from Taiwan to explore the care arrangements that are made for cognitively impaired elderly in a society that has a long tradition of family-based care.

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DIMENSIONS, SOURCES, AND CONSEQUENCES OF CONTROL IN ADULTHOOD AND LATE LIFE.

M. M. Skaff, Department of Family & Community Medicine, University of California, Box 0900, San Francisco, CA 94143, & L. I. Pearlin, Department of Sociology, University of Maryland, College Park, MD 20742-1315.

Participants:

L. I. Pearlin (Department of Sociology, University of Maryland, College Park, MD 20742-1315) The multiple meanings and dimensions of personal control.

S. H. Zarit, E. E. Femia, & B. Johansson (Gerontology Center, Penn State University, University Park, PA 16802 and Institute for Gerontology, University College of Health Sciences, S551 11 Jonkoping, Sweden) Mastery and control in very late life.

H. W. Lyons & M. E. Lachman (Psychology Department, Brandeis University, Waltham, MA 02254) Sense of control, social support, and health in adulthood.

M. M. Skaff (Department of Family & Community Medicine, University of California, San Francisco CA 94143-0900) Levels of control and health: Family and ethnic contexts.

Discussant:

R. Abeles (Behavioral and Social Research, NIA, Bethesda, MD 20892-9205).

Ample evidence has accumulated regarding the importance of feelings of control for health and well-being. If we are to progress in our understanding of the development of control across the life course and the role it plays in health, we need to better understand the meanings of control to the individual, the contexts that encourage or discourage a sense of control, and the mechanisms by which personal control exerts influence on well-being. One positive direction in current research has been to distinguish between levels of control; that is, between domain-specific evaluations of control and global control. Another is the examination of the conditions of aging that challenge sense of control and the mechanisms by which control is maintained despite losses. Little is currently known about the social context of personal control, how factors such as ethnicity, social class, and social support influence individuals' sense of control over their lives.

This symposium addresses these questions, first with a theoretical overview of where we are in our understanding of personal control. The other three papers address the relationship between levels of control and health in different contexts and at different points of adulthood, focusing on both global and health-specific sense of control.

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TRAJECTORIES OF LOSS-RELATED EVENTS, DEPRESSION AND SELF-RATED HEALTH AMONG THE AGED

S.M. Lynch, Dept. of Sociology and Center for Demographic Studies, Duke University, Durham, NC 27708.

As one ages, one's peers become more susceptible to health decline and death, implying potential growth in stressful loss events for the individual over time. However, no one has examined the effect of stress trajectories on the health of older persons. This research uses growth curve modeling to examine whether underlying growth in loss events occurs, and whether growth affects trajectories of depression and subjective health.

Three waves of NIA EPESE (Duke site) data were used in the analysis: counts of loss-related events were used to measure stress; depression was measured with the CESD; and self-rated health was measured with the 4-point item. In brief, the growth curve model for stress had excellent fit (IFI=1.0; R^2 for stress measures ranged from .19-.25). Also, the latent intercept and slope for stress were both positive and greater than 0, indicating growth in stress across age.

Models predicting depression and self-rated health fit quite well (IFI=.98 and 1.0, respectively; R^2 for depression and SRH indicators ranged from .52-.63). The latent intercept and slopes of stress were strongly related to those for both depression and health: most impressively, the R^2 for the latent slope of depression was .64, indicating that stress, when conceived of as a growth process, explains most of the growth in depression for elders.

In sum, stress follows a growth process for elders, and this process is strongly related to health. Implications include that stress may have greater consequences to elderly health than is currently thought.

PREDICTORS OF DEPRESSION IN ELDERLY WOMEN: A 6-YEAR FOLLOW-UP

S.M. Heidrich, School of Nursing, University of Wisconsin-Milwaukee, Milwaukee, WI 53201.

The purpose of this study was to examine predictors of depression in older women with health problems and individual differences in the course of depression. The effect of psychological resources--purpose in life, autonomy, positive relations with others, and personal growth--on depression were also investigated. Participants were 103 community-dwelling women (mean age = 77) who completed multiple, standardized, self-report surveys of physical health status, depression, and psychological well-being/resources in 1989, 1991, and

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1995. Repeated measures MANOVAs indicated significant increases in physical health problems, symptoms, and depression over time. Hierarchical multiple regression analyses, controlling for age, income, marital status, and 1989 depression, revealed that only baseline depression and a decline in purpose in life predicted depression at time 3. Women who became depressed over time differed from never depressed women in their high levels of physical symptoms at time 1. They differed from always depressed women in their higher levels of personal resources at each time. Attention to symptom experience and sense of purpose in life is warranted in interventions aimed at preventing and treating depression in elderly women.

PREDICTION OF THE PRESENCE AND STABILITY OF DEPRESSION IN GREAT LAKES NATIVE AMERICAN ELDERLY.

K.J. Curyto, E. E. Chapleski, P.A. Lichtenberg, & R. Kaczynski. Wayne State University, Detroit, MI 48202.

Depression research is almost non-existent with Great Lakes Native Americans. Extending previous work examining depression in older Great Lakes Native Americans, this study evaluated 204 subjects age 55 and older who were interviewed both at baseline [Time 1 (T1)] and 18 to 24 months later [Time 2 (T2)]. Two thirds of the sample were over age 65. Twenty percent had at least one ADL limitation at T1, 28 percent had at least one IADL limitation at T1, and the mean number of chronic medical diseases was 1.60. Examination of the prevalence of depression using the CES-D revealed that 16.5 percent of the sample at T1 and 19 percent of the sample at T2 scored at or above the traditional cutoff for depression (16). Subjects were identified categorically as having been depressed at both T1 and T2, at T1 but not T2, at T2 but not T1, or never having been depressed. Significant effects were found for functional ability and comorbid medical illness, indicating that physical and medical limitations are related to increased levels of depressive symptomatology, while age and education are not related to level of depression in this population. Also, the data suggest that poor medical functioning is predictive of those who develop depression later on. Further longitudinal research is needed to determine the causal paths between level of depression, medical disease, and physical functioning.

POVERTY HISTORY AND DEPRESSIVE SYMPTOMS AMONG THE ELDERLY

E.E. Thompson, Department of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI 48109-2029.

Research on the relationship between poverty status and psychological distress has often examined current poverty status rather than duration and changes; thereby, assuming poverty is a persistent and ongoing condition. In addition, previous research in this area has often overlooked that older women are more likely to experience poverty than men, and that men benefit more than women from marriage and employment. The purpose of this study was to test gender differences in the relative effects of current poverty status, and the history and dynamics of poverty between 1980 and 1990 on depressive symptoms using a sample of adults 50 years of age and older who participated in the 1990 Panel Study of Income Dynamics. A series of hierarchical regressions using ordinary least squares estimation were run to test the relative effects of current poverty status, total time in poverty, and fluctuations in-and-out of poverty on depressive symptoms. Among women, the total number of years in poverty and fluctuations in-and-out of poverty were the strongest predictors of depression (adjusted R^2 =23%). Whereas current poverty status and the total number of years in poverty were the strongest predictors of depressive symptoms among men, explaining approximately 26% of the variance. It appears that not only should the history of poverty but gender differences in poverty experiences be considered when examining the relationship between poverty status and depressive symptoms in older adults.

GENDER AND RACE EFFECTS ON THE FACTOR STRUCTURE OF THE CES-D IN OLDER MEDICAL INPATIENTS

R.L. Schein, H.G. Koenig, Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, NC 27710.

The CES-D is reliably used to screen depressive symptoms in a variety of community and patient samples. Factor analyses with community-based samples have generally yielded a four-factor structure, corresponding to the Depressed Mood, Somatic Symptoms, Well-Being, and Interpersonal Difficulties factors identified by Radloff (1977). Recent studies have questioned the validity of these factors in some populations, such as ethnic minorities and the medically-ill elderly. The purpose of this study was to examine the factor structure of the CES-D in African American and Caucasian medically-ill geriatric inpatients. Participants were 562 patients on the cardiology, neurology, and medicine services at a university medical center. They provided demographic information and completed the CES-D as part of a larger structured interview schedule. Additional health information was obtained from participants' medical records. Initially, factor analyses with oblique rotation were performed with no restriction on factors. Although the factor structure for the full sample resembled that found by Radloff, significant variations among gender and race groups were noted, yielding up to seven factors. When the number of factors was restricted to four, the original structure was essentially retained for females of both races. For white and black males, the first two factors to emerge are related to General Affect and Somatic Symptoms, and the Well-Being factor does not remain intact. Additionally, no Interpersonal Difficulties factor emerged for black males. The findings of these analyses suggest that the construct of depression may be experienced differently by subgroups of elderly medical patients based on both gender and race.

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FROM VIENNA TO 2000: THE AGING AGENDA REVISITED.

J.Sykes, Institute on Aging, University of Wisconsin. 1300 University Avenue, Madison, WI 53706.

Participants:

J. Alvarez, (Permanent Representative of the Dominican Republic to the United Nations, 144 East 44th Street, 4th Floor, New York, NY 10017) The Year of Older Persons: Celebrating Achievements, Facing Challenges.

G. Maddox, (Duke University, Univ. Council on Aging and Human Dev., Box 2920 Med. Ctr., Durham, NC 27710) Revisiting the International Association of Gerontology's 1982 "Message to the World Assembly": How Far Have We Come?

M. Pelaez, (Pan American Health Organization, 525 23rd Street, NW, Washington, DC 20037) PAHO's Goals to Implement the World Plan of Action and Strategies for Healthy Aging Throughout the Hemisphere.

J. Takamura, (Assistant Secretary for Aging, D/HHS Administration on Aging, 220 Independence Ave., SW, Washington, DC 20201) What's Ahead for the Elders of the United States: The Nation's Aging Agenda

Discussants:

M. Cantor, (Fordham University, Graduate School of Social Services, 113 West 60th St., New York, NY 10023)

J. Sykes, (Institute on Aging, University of Wisconsin)

In 1982 the World Assembly on Aging brought together political leaders from nearly all the nations of the world and leaders of gerontological and geriatric societies eager to influence the Assembly's World Plan of Action. "A Message to the World Assembly on Aging of the United Nations," edited by Hans Thome and George Maddox for the International Association of Gerontology, offered an agenda for action from the perspective of leading scientists and practitioners in the field. In this, the UN Year of Older Persons, it is timely to review the principal issues raised in the IAG document and the World Plan of Action and to ask: to what extent have the outcomes envisioned in those documents been achieved? Symposium presenters will review the history, intent and impact of IAG's entry into aging policy development, do a critical analysis of the impact of the Assembly Plan of Action on the progress gerontology has made since 1982, discuss activities for the UN Year of Older Persons, and offer a futuristic perspective on the unfinished aging agenda.

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GERIATRIC NURSE PRACTITIONER AND THE EDUCATION OF THE NEXT GENERATION OF HEALTH CARE PROVIDERS

S. Dubin, New York Hospital - Columbia Presbyterian, Allen Pavilion, 5141 Broadway, New York, NY 10034.

Participants:

C. Smyth (Montiefiore Medical Center, Bronx, NY 10467)The GNP & The "Teachable Moment."

H. Espana (St. Agnes Hospital, White Plains, NY 10605) A Teaching Model for Geriatric Nurse Practitioner Students.

S. Dubin (Allen Pavilion, Columbia Presbyterian, New York, NY 10034) The Geriatric Nurse Practitioner: Educator for Geriatric Assessment.

A. Restrepo (Beth Israel Medical Center, Newark, NJ) An Administrator's view of the Geriatric Nurse Practitioner's Positive Impact on Patient Care.

Discussants:

L. Capezuti (University of Pennsylvania, School of Nursing, Philadelphia, PA 19104)

K. Page, MD (New York Hospital-Columbia Presbyterian Medical Center, New York, NY 10032)

By the year 2030 the elderly population in the United States is projected to reach 65.6 million, or 22% of the total population. This growing population will require expert care and knowledge particular to the aging process to insure optimal outcomes within a cost effective framework. The medical community is beginning to address this issue by requiring gerontological spedific rotations in medical training . The GNP in the acute care setting is now being recognized as an educational resource for medical housestaff, physical therapists, dietitians, pharmacists and nursing.

This symposium will look at four different institutions and identify the specific programs that influence and alter the attitudes toward the hospitalized geriatric patient. The specific areas of influence discussed are: rounds with house-staff, geriatric assessment programs, comfort care, pain management and age specific responses to illness

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AGEWORKS: AN EXAMPLE OF PROVIDING GERONTOLOGICAL EDUCATION OVER THE INTERNET

Kathleen H. Wilber, Ethel Percy Andrus Gerontology Center, University of Southern California, Los Angeles, 90089-0191.

Participants:

Alexander Bucur (Andrus Gerontology Center) The state of technology for Internet-based gerontological education.

Julie Overton and Carl Renold, (Andrus Gerontology Center) Gerontology content development in distance learning: seeing the forest through the trees.

Edward L. Schneider and Maria Henke, (Andrus Gerontology Center) Program Administration and faculty participation.

David A. Peterson and Rachel B. Seymour, (Andrus Gerontology Center) Evaluation of Student Outcomes of an Online Gerontology Course.

Maria Henke and Alexander Bucur .(Andrus Gerontology Center) The future: Online opportunities for customized content and learning styles.

Discussant:

James Callahan (Brandeis University)

Developments of the Internet and its computing related tools have made online education readily available. The need of gerontology education for professional makes this educational medium a very attractive possibility. This symposium describes how AgeWorks, an online gerontological distance project, has generated, provided and evaluated such a novel approach.

The first presentation will describe new technologies available for course implementation, and how they were applied to AgeWorks. The second paper describes the challenges and tribulations associated with content transition from a classical teaching paradigm to online courses. The paper by Schneider and Henke discusses how to facilitate program administration and establish faculty participation in the developing of content, as well as teaching of courses. The paper by Peterson and Seymour deals with online program evaluation, and describes AgeWorks approached this issue. Finally, Henke and Schneider paper deals with the future of online learning: customized learning and testing based on students' characteristics.

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THE MALE CAREGIVER

B. J. Kramer. School of Social Work, University of Wisconsin-Madison, 1350 University Ave., Madison, WI 53706.

Participants:

B. Miller (Mandel School of Applied Social Sciences, Case Western Reserve University, Cleveland, OH 44106) Alzheimer's Caregiving: Equalizing or Differentiating Gender Roles?

E. L. Essex, M. M. Seltzer, & M. W. Krauss, (Waisman Center, University of WI-Madison, 53705; Dr. Krauss is with Brandeis University, Waltham, MA) Aging Parental Caregivers of Adults with Mental Retardation: Parental Gender and Intergenerational Intimacy.

B. J. Kramer (School of Social Work, University of WI-Madison, 53706) A Longitudinal Examination of Husbands Caring for Wives with Dementia: The In-Home Versus Nursing Home Experience.

P. B. Harris (Department of Sociology, John Carroll University, Cleveland, OH 44118) Listening to the Caregiving Experiences of Husbands and Sons.

Discussant:

L. W. Kaye (Graduate School of Social Work & Social Research, Bryn Mawr College, Bryn Mawr, PA 19010).

Given that women predominate in the caregiving role, researchers have largely neglected the experience of male caregivers. This inattention to the male caregiver fails to recognize the contributions these men make to family life, it ignores the growing numbers of men who struggle in this role, it hampers our ability to understand how caregiving varies by gender, and as such, it limits our ability to design gender relevant interventions. In this symposium a panel of researchers will present current studies that investigate the experience of the male caregiver.

The first paper compares self-reported changes in perceived dominance, expressivity, and marital satisfaction before and after the onset of caregiving at different levels of disease severity among 215 husbands and wives caring for spouses with dementia. The second paper contrasts the experience of older fathers and mothers who are caring for a son or daughter with mental retardation in terms of expressivity and affective closeness with the care receiver. The third paper uses longitudinal data to examine the in-home versus nursing home experience of husbands caring for wives with dementia. The fourth paper, uses qualitative methods to investigate the with-in group as well as the between-group commonalties and differences among a purposive sample of 30 husbands and 30 sons who are in the caregiving role.

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NEW DIRECTIONS IN HCBS: RESEARCH ON FINANCING, TECHNOLOGY AND ASSESSMENT

P. Feldman, Center for Home Care Policy & Research, Visiting Nurse Service of NY,107 E.70th, NY, NY 10021

Participants:

F. Caro & A. Gottlieb (U. Of Mass., Boston) *Low Cost Adaptive Equipment to Extend Home Care Effectiveness*

B. Fries (U. Of Michigan, Ann Arbor) *Evaluating the Michigan Managed Long Term Care Initiative*

M. Cohen (Center for Policy Research Syracuse U.) *The Impact of Private LTC Insurance on Patterns of Caregiving*

Discussants:

Lillian Glickman, Acting Secretary, Mass. Executive Office of Elder Affairs

Mary James, Director, LTC Health Plan Division, State of MI

The increased use of home and community-based care has caused concern over both service costs and outcomes. The demand for home and community-based services is being fueled by consumer preference, population aging, increasing numbers of dual career families that limit time available for informal care, sustained pressure to reduce hospital and nursing home stays, and technological advances that make it possible to manage more complex conditions at home. At the same time, fiscal and political forces are pushing for cuts in expenditure growth and limits on government's responsibility. For example, the balanced budget legislation passed in 1997 reduced Medicare's home health program by $16 billion over the five year period, 1997-2002. As Public Policies evolve, information is needed about how best to allocate home and community-based care resources at the system level and how to improve targeting of services to individuals.

The Home Care Research Initiative (HCRI), a program funded by the Robert Wood Johnson Foundation, supports research in two areas of inquiry that focus on mechanisms for the allocation of resources and the efficient delivery of services. This symposium will provide a forum for discussing the policy applications and implications of research projects funded under this initiative. The projects focus on three policy relevant issues: 1) How do private LTC insurance policyholders use services and how does their use compare to that of individuals at risk who do not have insurance? 2) How can publicly financed home care systems enhance efficiency by promoting the use of low cost assistive technology? 3) How can a state improve assessment and targeting of LTC services by using the "state of the art" information and assessment technology?

Glickman and James will discuss the presentations from the perspectives of state policy makers commenting on the particular policy implications of the research projects and the broader policy issues.

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INNOVATIVE APPROACHES IN LONG-TERM CARE FOR MANAGING CHALLENGING BEHAVIORS ASSOCIATED WITH DEMENTIA

B. Ingersoll-Dayton, School of Social Work, The University of Michigan, 1080 South University, Ann Arbor, MI, 48109.

Participants:

J. Rader (Benedictine Institute, for Long Term Care and Oregon Health Sciences University, Mt. Angel, OR, 97362) The Environment: A Resident's Friend or Foe.

T. Schroepfer, B. Ingersoll-Dayton, & J. Pryce, The U. of Michigan School of Social Work, Ann Arbor, MI, 48109) Using a Solution-Focused Approach with Staff and Family Caregivers.

J. Pryce, B. Ingersoll-Dayton, T. Schroepfer & C. Waarala (The U. of Michigan School of Social Work Ann Arbor, MI, 48109) Fostering Empathy and Empowerment among Staff and Family Caregivers.

S. Weaverdyck (Eastern Michigan University, Ypsilanti, MI, 48197 and The University of Michigan Turner Geriatric Center) ADLs at Huron Woods: Intervention Strategies to Teach Staff

Discussant:

L. Gwyther (Duke University Medical Center, Durham, N.C., 27710)

The challenging behaviors of older people with dementia affect their quality of life, as well as that of their family and the professionals who care for them. This symposium is for practitioners interested in innovative approaches for managing difficult behaviors among nursing home residents. The presentations reflect recent developments in the professions of nursing, social work, and psychology. Based on clinical research studies, presenters will discuss new practice approaches to enhance quality of life in nursing homes. These innovations will include changes in: 1) the environment; 2) the social interactions of staff, family; and residents, and 3) the education of staff. Together, these approaches represent a mosaic of interventions needed to meet the challenges of caring for residents with dementia in the new millennium.

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DID THE NURSING HOME REFORM ACT WORK?

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In 1987, Congress passed the Nursing Home Reform Act (NHRA). The intent of the NHRA was to improve the quality of nursing home care through regulatory reform. One aspect of the NHRA was designed to screen out applicants for nursing home care who needed only mental health care, with no need for nursing or medical services. Earlier studies have documented high rates of mental disorders (Lair & Lefkowitz, 1990) and low rates of mental health treatment (e.g., Smyer, Shea, & Streit, 1994), using the National Medical Expenditure Survey data collected before the NHRA. The focus of this presentation is the efficacy of the NHRA screening process: Did the NHRA reforms alter the patterns of mental disorders among nursing home residents? Drawing on the 1996 Medical Expenditure Panel Survey (MEPS) data, this presentation offers an initial comparison of rates of mental disorders among nursing home residents prior to and after the NHRA. Preliminary analyses indicate that a majority of nursing home residents still have a mental disorder, including dementia, in the post-NHRA era: 15% of nursing home residents have

Alzheimer's disease; 35% have unspecified dementia; 20% have depression; and 8% have an anxiety disorder. These rates are comparable to the patterns of mental disorders prior to the NHRA (Burns et al., 1993). These data suggest that nursing homes continue to play a central role in caring for mentally ill elderly. Implications for public policy, regulatory reform, financing, and service provision will be discussed.

CHAPTER 400 IN THE STATE OF FLORIDA: INCREASED LIABILITY FOR NURSING HOMES

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The state of Florida enacted Chapter 400, which delineates the civil rights of nursing home clients. This law singles out nursing homes for increased malpractice exposure by associating civil rights with biological outcomes and social concerns. This legislation also permits trial lawyers to collect payment of legal fees separate from awarded damages. A small injury could translate into thousands of dollars for plaintiff attorneys. In fact, two recent court cases resulted in million dollar settlements against nursing homes. Law firms for the plaintiffs actively advertise in mass media for unhappy families of nursing home residents. We report the results of 19 cases against Florida nursing homes over a 3-year period. All cases were settled out of court, for amounts averaging in the hundreds of thousands of dollars. None went to trial. All cases focused on Chapter 400 and deprivation was noted in all cases. None of the physicians involved in patient care were sued, only the nursing homes. While creating serious financial problems for nursing homes in several counties in Florida, Chapter 400 has put quality-of-life issues at odds with quality-of-care standards, and puts the nursing home in the middle of often incompatible measures of care.

A NATIONAL STUDY OF THEFT IN NURSING HOMES.

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Despite allegations that theft in nursing homes is prevalent, to date the subject has been ignored by researchers with the exception of two limited studies done by the authors. The purpose of this present research was to provide the first national data on this understudied topic in order to determine the extent of theft in nursing homes, to identify some of the organizational and demographic factors associated with theft, and to develop strategies to prevent or reduce it. Based on a stratified sample of 30 nursing homes in 10 states, the researchers distributed self-administered questionnaires to all the employees of these homes and to the patients' families, and nursing home administrators. Our analysis reveals that 2% of employees self-reported theft, 17% of the employees reported seeing or suspecting other employees of theft, and 20% of family members reported the theft of their relatives' possessions. Organizational characteristics related to theft of patients' belongings include longevity of personnel and size and ownership (for profit and nonprofit) of the facility. The findings show that the demographic variables that affect the phenomenon of nursing home theft are age, sex, and race.

VIOLENCE AGAINST CAREGIVERS IN NURSING HOMES: A FOCUS GROUP STUDY

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Workplace violence is a serious and growing societal problem in the U.S (Gates, 1996). The occupation at greatest risk for non-fatal assault was found to be the nurse aide and the person responsible for the assault was most often the nursing home resident (BLS, 1994). The Occupational Safety and Health Administration (OSHA) requires employers to protect workers from violence. Scant research exists that examines nursing homes and assaultive residents as a workplace practice issue. This focus group study describes nurse aide and nursing home directors' experience with assaultive residents and examines beliefs about recognizing, preventing, and managing violent episodes. Results indicate that nurse aides frequently experience physical and emotional injuries that are expected, tolerated, and accepted by nurse aides and nursing home directors. Recommendations include testing innovative approaches designed to recognize, prevent, manage resident violence involving caregivers in the nursing home and meet ethical, legal, and OSHA practice requirements.

POINTS OF DEPARTURE: FACTORS ASSOCIATED WITH CERTIFIED NURSE AIDE TURNOVER

R. R. Wacker, College of Health and Human Sciences, Gerontology Program, University of Northern Colorado.

The purpose of the present study was to describe the extent to which various personal, organizational, and work variables were significantly related to intention to leave. Data were collected from 205 CNAs working in nursing homes and home health care agencies. Information collected from the resondents included the Aide's perception of their training and skill level, chance for advancement, role overload, ambiguity, and conflict, participation in care conferences, recognition and appreciation received from staff and administrators, relationship with other Aides and charge nurses, emotional burnout and social support. Correlation analyses revealed that role overload, relationship with nursing staff, attending care conferences, burnout, and current salary had a significant relationship with intention to leave.

Regression statistics revealed that appreciation and recognition, role overload and relationship with nursing staff were significantly related to emotional burnout, which was in turn predictive of intention to leave. Implications for reducing CNA turnover rates were discussed. (Research funded by The Retirement Research Foundation).

TRENDS IN SOCIAL SERVICES IN NURSING HOMES IN THE ERA OF MANAGED CARE

Patricia Kolb, Ph.D., Columbia University School of Social Work, 622 W. 113 St., New York, New York 10025.

Changes in health care funding and service delivery in the United States have influenced the structure and functions of nursing homes, work of staff, and delivery of services to residents. These changes have affected social workers in nursing homes throughout the U.S. The author's research has identified trends in social work staffing, funding, and provision of services in nursing homes throughout the country.

Directors of social work departments in over 200 nursing homes returned questionnaires which were mailed in late 1997 and early 1998. These nursing homes vary with regard to size of facility, size and urban/rural location of the community in which they are located, and ownership of the home (i.e., corporate chain, single privately owned, nonprofits with and without religious affiliation, etc.). Respondents varied greatly in education, ranging from social service designees with a high school degree to a director with a Ph.D.

Regardless of educational level, the directors shared many of the same responsibilities and concerns, including responsibility for direct services for residents and families, admission of long term residents, and quality assurance monitoring. Throughout the country, but not in all homes in any specific state or region, social service providers and the residents whom they assist are experiencing changes due to placement of short term subacute patients whose stay is paid for by managed care providers, changes resulting from the sale and resale of nursing homes to corporate chains, more paperwork, and a shared concern about the loss of time to provide direct services to long term clients. Concerns such as these exist even when staff size has been increased.

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ELDER'S SATISFACTION WITH COMMUNITY BASED CARE

J. Kolodinsky, Ph.D. and L. Shirey, Community Development and Applied Economics, 202 Morrill Hall, University of Vermont, Burlington, VT 05405

Community based care plays a large role in the struggle of elders to age in place. While these services allow elders to remain independent, they may also allow the government to decrease its allocation of funds to institutional care. However, the satisfaction of elders who use paid services at home should not be comprised.

Telephone interviews were conducted in 1997 with 300 elders who use community services in both rural and urban areas in a Northeastern state. Data includes information on demographics and numerous measures of physical and cognitive status. Satisfaction with services as well as the quality of life were measured using a five point Likert scale. Results indicate that, in general, elders who use community based services are very satisfied; however satisfaction ranged from 58% to 77%. Respondents were least satisfied with the availability of services and most satisfied with the value of services. In addition, there is a relationship between health status of the elder and his/her degree of satisfaction. Rural versus urban residence was also related to the level of satisfaction with care.

The results of this study are useful in the development of community based coalitions that aim to administer quality services based on desired system outcomes. Community decisions about direct services need to be made in conjunction with the state departments on aging to ensure better quality of care.

HOME CARE MANAGERIAL PRACTICES AND PARAPROFESSIONALS' JOB PERCEPTIONS

Janet R. Buelow, School of Business, University of South Dakota, 414 E. Clark Street Vermillion, S.D. 57069-2390.

Home care is increasingly recognized as a necessary and often preferred service in our long-term care system. Paraprofessional workers are a vital part of this service; acting as the frontline laborers and providing the basic care to maintain clients in their homes. The availability and quality of these workers is essential to an agency's viability. This presentation reports on a study which asked, "How do specific managerial practices support the intrinsic job satisfaction of home care paraprofessionals?"

Paraprofessionals from home care agencies were surveyed regarding their perceptions of specific managerial practices and intrinsic job satisfaction. Clients were interviewed regarding their perceptions of the quality of care. Survey data were analyzed with a hierarchical regression model. Results indicate specific leadership practices, in-service training style, and the perceived influence of the mission explain over 50 percent of the variance in intrinsic job satisfaction. Both the managerial practices and measurements will be discussed, as well as the implications of significant findings for home care clients.

SOCIAL AND EMOTIONAL CAREGIVING: A CRUCIAL COMPONENT OF QUALITY HOME HEALTH CARE

Kathleen W. Piercy, Department of Family and Human Development, Utah State University, Logan, UT 84322-2905.

Recent family caregiving research highlights the importance of social and emotional aspects of care provision to positive caregiving experiences. A qualitative study consisting of 31 interviews with home health care aides, their elderly care recipients, and family caregivers was conducted to explore the relative importance of instrumental and social/emotional care to perceptions of good quality home care. Data from clients and family caregivers suggest that competent technical skills are expected from home care providers, but often excluded from definitions of quality home care. Instead, relationships with care providers are emphasized.

Home health aides also defined quality care by emphasizing the relational components of care. Rapport-building activities such as active listening and seeking information about clients' preferred ways of doing things enabled the establishment of close relationships with clients. Worker flexibility and dependability maintained these

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relationships over time and contributed to client and family caregiver definitions of good quality home care. Workers strove to meet client expectations while simultaneously accommodating the requirements of funding and employing agencies. Results from this study can be used to improve worker hiring and training practices and to support the goal of continuity of care provision by the home care industry.

WHAT PROMPTS CAREGIVERS TO STAY OR LEAVE HOME HEALTH AGENCIES?

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M. Duffy, Educational Psychology Department, Texas A&M University, College Station, TX 78743.

The quality of life of elderly home health clients is impacted by whether a home health worker stays or leaves the agency. A worker who stays in the role of home health caregiver has the opportunity to build important emotional ties with the elderly person and to learn about the specific needs of the elderly client. When a worker quits, the continuity of caregiving is disrupted. In a current study of nearly 300 home health workers from twenty agencies, the factors linked to staying or leaving are identified. The paper will present original data collected from Likert scale qustionnaires distributed to workers and returned by mail. Univariate, correlational and regression analyses were used. The results indicated that workers who were satisfied with their work had strong bonds with clients, supervisors and the agency. They tended to feel they were doing a good job because of their ability and the availability of supplies. Workers who wanted to quit their jobs tended to feel overworked with little chance to accomplish something worthwhile. Their feeling of burnout was compounded by a sense that clients' well being was dependent on their work. Moreover, home health workers who wanted to quit felt that neither their supervisor nor the home health agency was concerned about them. The findings of this study suggest ways to improve the service delivery in home health care by keeping a stable work force.

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THE "FIRE WALL" PROBLEM: QUALITY CARE, PUBLIC TRUST AND CONFLICTS OF INTEREST

B. Thompson, University of Texas Medical Branch at Galveston, Department of Family Medicine, 301 University Avenue, Galveston, TX 77555-1123.

Participants:

M.K.Goldstein (VA Palo Alto Health Care System, 182B GRECC, 3801 Miranda Avenue, Palo Alto, CA 94304) Developing Clinical Practice Guidelines for Care of the Dying Patient.

J. Hill (University of Texas Medical Branch at Galveston) Can Hippocrates, the Supreme Court, and Columbia HCA Peacefully Co-Exist? Ethical and Legal Challenges to End of Life Care.

N.J. Nusbaum (Geriatrics Section, Department of Medicine, Tulane University School of Medicine at New Orleans VA Medical Center, New Orleans, LA 70146) End of Life Care—Bedside Clinical Care Decisions and Public Policy Choices.

M.R. Wasserman (GeriMed of America, 333 West Hampden Avenue, Suite 200, Englewood, CO 80110) Is Quality End of Life Treatment Compatible With Managed Care?

Discussants:

C.L. Cassel (The Mount Sinai Medical Center, One Gustave L. Levy Place, Annenberg Bldg., Room 10-14, New York, NY 10029-6574.

J. Lynn (Center to Improve Care of the Dying, George Washington University, 1001 22nd Street, NW, Suite 820, Washington, DC 20037).

Physicians must make decisions about when to accept dying patients and how to treat persons at risk of dying. Such determinations occur under the shadow of possible conflicts of interest in risk-bearing capitated care. This symposium addresses the fire wall problem—how to build a wall between good practice and unjustifiable practice in a way that instills public trust and avoids conflicts of interest. Panelists will discuss the relative contributions of life-prolonging treatment versus quality-of-life treatment to the costs of care in the last year of life; describe recent attempts to overcome ethical and legal challenges to quality palliative care; review the use and potential misuse of the concept of futility; and explain how a focus on principles of Geriatric Medicine can enhance incentives and alleviate disincentives to provide appropriate end of life care.

Technology and Aging Interest Group

WORTH-THE-WHILE: A WINDOW TO THE WIDE-RANGED WORLD OF RESEARCH AND PRACTICE IN TECHNOLOGY AND AGING

G. Lesnoff-Caravaglia, Division on Aging, College of Health and Human Services, Ohio University.

Participants:

P.S. Liebig, D.J. Sheets (Andrus Gerontology Center, University of Southern California) Assistive Technology Devices and Services: Financing, Delivery, and Policy Issues.

W.C. Mann (Dept. Occupational Therapy and Center for Assistive Technology and Rehabilitation Engineering Research Center [RERC] on Aging, University at Buffalo) Overview of Research of the NIDRR Rehabilitation Engineering Center on Aging.

M.P. Rubert, S.J. Czaja (University of Miami School of Medicine, Miami, FL 33136) Get Help

Without Leaving Home: Technology Helps Caregivers Connect.

R.D. Ellis, R. Pamulapati, J. Jasper, S. Mettubavi (Institute of Gerontology, Wayne State University) A Review and Annotated Bibliography of Research of Computers and Aging.

Discussant:

E. Steinhagen-Thiessen, Dept. of Geriatrics Research, Humboldt University Berlin.

The scope of the research and practice field of "Technology and Aging" is tremendous. Much of it is overlooked, underresearched, underfinanced or simply unknown. However, gerontologists need to stay abreast of recent technological developments, and state-of-the art practice applications, very much in the vein of the congress theme "the Changing Contexts of Aging: Opportunities and Challenges in the New Millenium". The aim of this session is to present a range of diverse topics provided by the presenters -- assistive technology, assistive devices, and communications and computer applications in aging -- which are complemented by the chair and discussant with perspectives on additional foci in research and practice, feasibility issues, and "what else is there" addenda (such as digital patient records, computerization in the geriatric health services delivery workflow, computer-assisted assessment, counseling and therapy). One of the most important aspects involved seems to be the interplay and cooperation of multiple disciplines in health care and technology diciplines that has led to a lag of technology development and de-facto implementations in practice, partly due to the lack of empirical evidence of documented "worth", but also attributable to social policy factors and insufficient information. The session is meant to provide (1) an overview and (2) to instill thoughts to act and discussions on perspectives and potentials to make better use of research findings and the available technology.

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Roman numbers refer to participants listed in the front part of the program.
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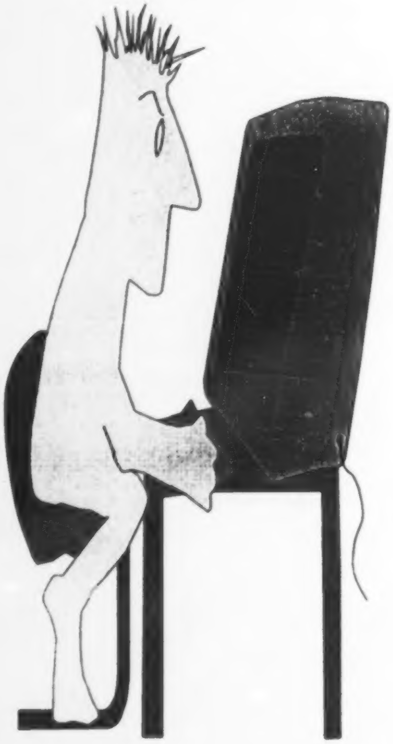

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